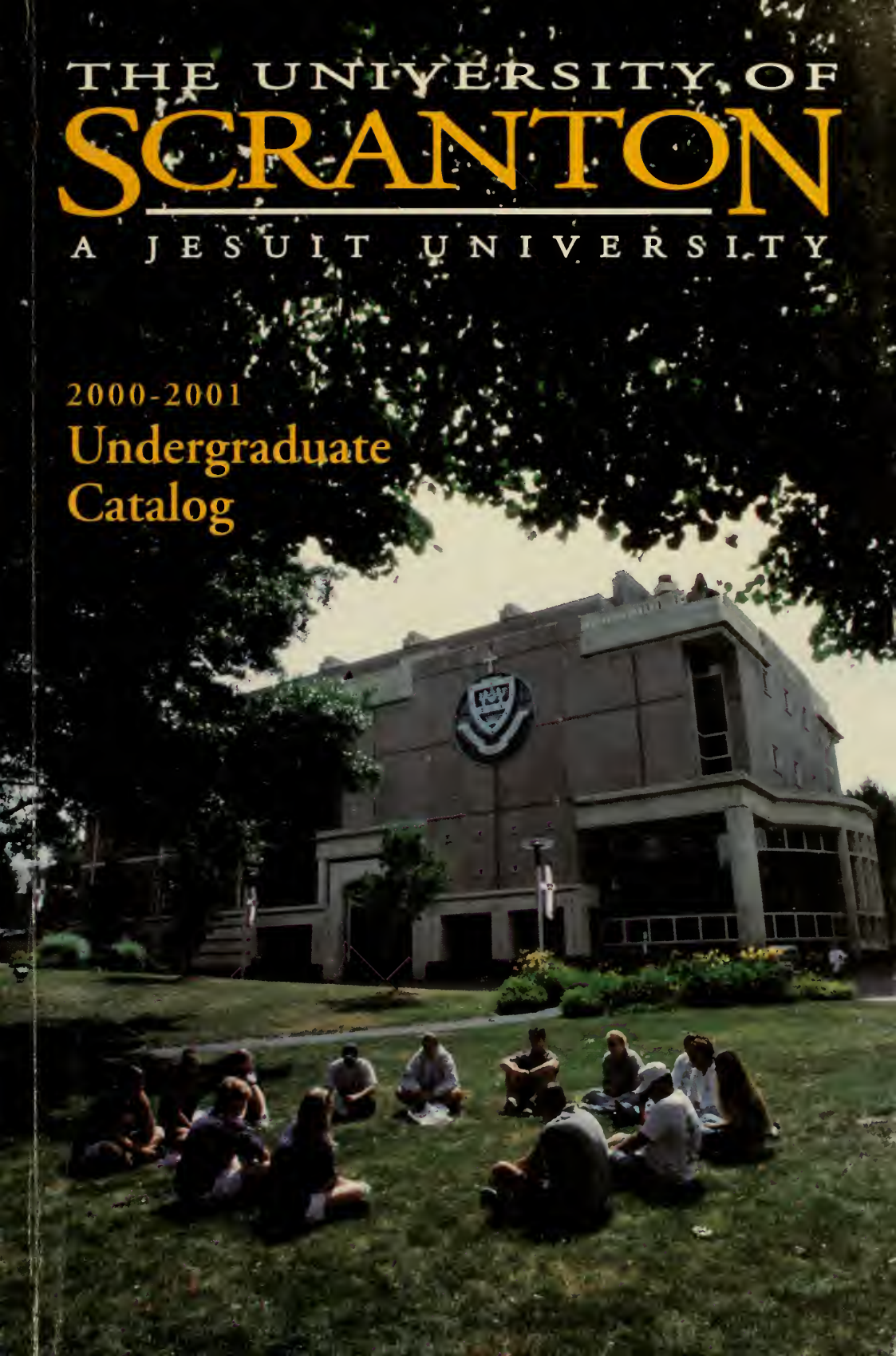
# THE UNIVERSITY OF SCRANTON

A JESUIT UNIVERSITY

2000-2001

# Undergraduate Catalog



# THE UNIVERSITY OF SCRANTON

## ACADEMIC CALENDARS

### FALL 2000 SEMESTERS SPRING 2001

| | | | |
|---|---|---|---|
| Aug. | 24 | Dexter Hanley College Student Orientation | Jan. 24 |
| Aug. | 26 | Housing opens for new students | |
| Aug. | 26 | New Student Enrollment Verification | |
| Aug. | 26-27 | New Undergraduate Student Orientation | |
| Aug. | 27 | Housing opens for returning students | Jan. 28 |
| Aug. | 27 | Enrollment Verification Arena/continuing students | |
| Aug. | 27 | Graduate School Orientation | Jan. 27 |
| Aug. | 28 | Classes Begin | Jan. 29 |
| Aug. | 31 | Holy Spirit Liturgy | |
| Sept. | 1 | Convocation Assembly | Jan. 31 |
| Sept. | 1 | Last Day to Add Courses | Feb. 2 |
| Sept. | 4 | Labor Day. No Classes | |
| Sept. | 6 | Last Day 100% Refund (non-flat rate only) | Feb. 7 |
| Sept. | 8 | Last Day to Declare Pass-Fail | Feb. 9 |
| Sept. | 13 | Last Day 75% Refund (non-flat rate only) | Feb. 14 |
| | | Multi-Cultural Overnight | Feb. 15-16 |
| Sept. | 20 | Last Day 50% Refund (non-flat rate only) | Feb. 21 |
| | | Royal Nights I | Feb. 22-24 |
| Sept. | 27 | Last Day 25% Refund (non-flat rate only) | Feb. 28 |
| Sept. | 27 | Last Day to Drop a Class | Feb. 28 |
| Sept. | 29 | Homecoming | |
| Oct. | 4 | Last Day to Elect Audit Grade Option | Mar. 9 |
| Oct. | 4 | Incomplete Grades Due | Mar. 9 |
| Oct. | 4 | Quarter Ends | Mar. 9 |
| Oct. | 6 | University Housing closes at 6:00 p.m. | Mar. 9 |
| Oct. | 7 | Semester Break Begins | Mar. 10 |
| | | Quarter Grades Due | Mar. 13 |
| Oct. | 10 | University Housing re-opens at noon | Mar. 18 |
| Oct. | 11 | Classes Resume after Break | Mar. 19 |
| | | Royal Nights II | Mar. 22-24 |
| Oct. | 11 | Quarter Grades Due | |
| Oct. | 21 | Graduate School Comprehensive Exams | Apr. 7 |
| | | Freshman Preview Day | Apr. 7 |
| Oct. | 22 | Admissions Open House I | |
| Nov. | 5 | Admissions Open House II | |
| Nov. | 8 | Last Day to Withdraw | Apr. 11 |
| Nov. | 11-12 | Family Weekend | |
| Nov. | 19 | Academic Celebration Day | |
| Nov. | 21 | Last Day of Class before Thanksgiving/Easter | Apr. 11 |
| Nov. | 22 | No Classes/University Housing closes at noon | Apr. 12 |
| Nov. | 22 | Thanksgiving/Faster Holiday Begins | Apr. 12 |
| | | Easter Sunday | Apr. 15 |
| Nov. | 26 | University Housing re-opens noon | Apr. 16 |
| Nov. | 27 | Classes Resume After Holiday | Apr. 17 |
| Dec. | 1-7 | Last Week of Classes (No Exams) | May 7-11 |
| Dec. | 7 | Last Day of Class | May 11 |
| Dec. | 8 | Study Day/s | May 12, 13 |
| Dec. | 9 | Final Exams Begin | May 14 |
| Dec. | 14 | Semester Ends | May 18 |
| Dec. | 15 | University Housing closes | May 19 |
| Dec. | 19 | Final Grades Due | TBA |
| | | Graduate School Commencement | May 26 |
| | | Undergraduate Commencement | May 27 |
| | | University Housing closes | May 28 |
| | | Memorial Day | May 28 |

## SHORT SESSIONS

### INTERSESSION 2001

| | | | |
|---|---|---|---|
| Jan. | 2 | University Housing Opens at noon | May 29 |
| Jan. | 3 | Classes Begin | May 30 |
| Jan. | 4 | Last Day to Add | May 31 |
| Jan. | 4 | Last Day to Declare Pass-Fail Option | May 31 |
| Jan. | 5 | Last Day 100% Tuition Refund | Jun 1 |
| Jan. | 8 | Last Day to Drop/50% Tuition Refund | Jun 4 |
| Jan. | 15 | Last Day to Elect Audit Option | Jun 14 |
| | | Last Day to Register for Grad Comps | |
| | | Independence Day Holiday | Jul 4 |
| | | Graduate Comp Exams | |
| Jan. | 18 | Last Day to Withdraw | Jun 21 |
| Jan. | 26-27 | Graduate Final Exams Begin | Jun 27 |
| Jan. | 25-26 | Undergraduate Final Exams Begin | Jun 28-29 |
| Jan. | 27 | Session Ends | Jun 29 |
| | | University Housing Closes at Noon | Jun 30 |
| Jan. | 31 | Final Grades Due by Noon | Jul 2 |

### SUMMER SESSIONS 2001

| I | Grad | II |
|---|---|---|
| | | Jul 8 |
| | Jun 18 | Jul 9 |
| | Jun 19 | Jul 10 |
| | | Jul 10 |
| | Jun 20 | Jul 11 |
| | Jun 21 | Jul 12 |
| | | Jul 24 |
| | Jun 22 | |
| | Jul 4 | |
| | Jul 14 | |
| | Jul 18 | Jul 31 |
| | Jul 25-26 | Aug 7 |
| | | Aug 7-8 |
| | Jul 26 | Aug 8 |
| | | Aug. 9 |
| | Aug 2 | Aug 13 |

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Dexter Hanley College Admissions Office (570) 941-7580
Office of Financial Aid (570) 941-7700
Office of the Registrar (570) 941-7720
Graduate School Office (570) 941-7600
University Fax: (570) 941-6369

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# THE UNIVERSITY OF SCRANTON UNDERGRADUATE CATALOG 2000-2001

**A Community of Scholars**
**A Culture of Excellence**

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The University reserves the right to refuse to admit or readmit any student at any time should it be deemed necessary in the interest of the student or of the University to do so and to require the withdrawal of any student at any time who fails to give satisfactory evidence of academic ability, earnestness of purpose, or active cooperation in all requirements for acceptable scholarship.

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# TABLE OF CONTENTS


Page

A COMMUNITY OF SCHOLARS - A CULTURE OF EXCELLENCE ..... 5
- The Seal of the University ..... 6
- History of the University ..... 7
- The Campus ..... 8
- Mission of the University ..... 9
- A Faculty of Teachers and Scholars ..... 11
- Student Diversity and Participation ..... 11
- Indices of Achievement ..... 12
- Honor Societies ..... 17

ADMISSION, EXPENSES, FINANCIAL AID ..... 21

SCHOLARSHIPS AND FINANCIAL AID ..... 31

ACADEMIC PROGRAMS ..... 49
- Degrees and Curriculum ..... 50
- Academic Regulations ..... 55
- General Education ..... 63
- Freshman Option ..... 74

THE COLLEGE OF ARTS AND SCIENCES ..... 77
- Art and Music ..... 78
- Biology ..... 84
- Chemistry ..... 91
- Biochemistry ..... 92
  - Chemistry-Business ..... 94
  - Chemistry-Computers ..... 95
  - Medical Technology ..... 96
- Communication ..... 101
- Computing Sciences ..... 109
- Computer Information Systems ..... 110
- Criminal Justice ..... 114
- Economics ..... 118
- Engineering ..... 119
  - Computer Engineering ..... 120
  - Electronics-Business ..... 121
  - Electrical Engineering ..... 122
  - Pre-Engineering ..... 123
- English ..... 127
  - Theatre ..... 137
  - Writing ..... 141
- Environmental Science ..... 143
- Foreign Languages and Literatures ..... 145
- International Language-Business ..... 147
- History ..... 158
- International Studies ..... 159
- Mathematics ..... 166
- Military Science ..... 171
- Neuroscience ..... 175
- Philosophy ..... 178
- Physics ..... 184
- Biophysics ..... 185
- Political Science ..... 189
- Psychology ..... 196
- Sociology ..... 201
- Gerontology ..... 202
- Theology and Religious Studies ..... 208
- Interdisciplinary Courses ..... 216

THE KANIA SCHOOL OF MANAGEMENT ..... 218
Accounting ..... 221
Economics/Finance ..... 226
Electronic Commerce ..... 230
Enterprise Management Technology ..... 233
Finance ..... 237
International Business ..... 239
Management ..... 241
Marketing ..... 246
Operations and Information Management ..... 248
THE PANUSKA COLLEGE OF PROFESSIONAL STUDIES ..... 251
Counseling and Human Services ..... 252
Education ..... 259
Exercise Science and Sport ..... 279
Health Administration and Human Resources ..... 283
Long-Term Care Administration ..... 285
Human Resource Studies ..... 288
Nursing ..... 292
Occupational Therapy ..... 299
Physical Therapy ..... 306
THE DEXTER HANLEY COLLEGE ..... 314
Baccalaureate Degrees ..... 315
Admission Information ..... 316
Associate Degrees ..... 323
Certificates ..... 329
SAINT PIUS X SEMINARY ..... 339
THE GRADUATE SCHOOL ..... 341
HONORS AND INTERDISCIPLINARY PROGRAMS ..... 344
Special Jesuit Liberal Arts ..... 344
Honors ..... 346
Business Leadership Program ..... 348
Catholic Studies Program ..... 349
Environmental Studies ..... 351
Human Development ..... 352
Italian Studies Concentration ..... 353
Latin American Studies ..... 354
Peace and Justice ..... 355
Women's Studies Concentration ..... 356
Other Special Programs ..... 357
Pre-Law Program ..... 359
Pre-Medical Program ..... 361
Aerospace Studies ..... 362
OUTSIDE THE CLASSROOM ..... 364
Student Affairs ..... 365
Athletics ..... 367
Extracurricular Activities ..... 371
UNIVERSITY DIRECTORY ..... 373
ACCREDITATIONS ..... 397
ASSOCIATION OF JESUIT COLLEGES AND UNIVERSITIES ..... 398
INDEX ..... 399

# A Community of Scholars
# A Culture of Excellence

The University of Scranton is a community of scholars whose ministry of education is informed by the vision of life contained in both the Gospels and the Spiritual Exercises of Saint Ignatius Loyola. The University is therefore dedicated to freedom of inquiry, the pursuit of wisdom, integrity and truth, and the personal growth and development of all who share in its life and ministry.

# THE SEAL OF THE UNIVERSITY OF SCRANTON

The principal colors of the shield are the traditional colors of the University, white and royal purple. On the purple field there is a horizontal silver bar, containing, in purple, a star taken from the seal of the Brothers of the Christian Schools and from the seal of Saint Thomas College, predecessor of the University, and two stacks of wheat from the obverse of the coat of arms of the Commonwealth of Pennsylvania.

The upper half of the shield contains, in gold, two wolves grasping a cauldron suspended from a chain; they are taken from the coat of arms of the family of Saint Ignatius Loyola, and they identify the University as a Jesuit institution. Below the silver bar is a golden rising sun, symbolic of Saint Thomas Aquinas, the shining light of the Church and the Patron of the University.

Indicating the Diocese of Scranton and William Penn, founder of the Commonwealth, the black border of the shield reproduces the border of the shield of the Diocese and the silver hemispheres are taken from William Penn's coat of arms.

The crest is a golden cross of the particular style known as Patonce. It symbolizes Christ, the goal and the norm of the University's educational efforts, and it complements the motto which the University has had since its foundation: *Religio, Mores, Cultura.*

# HISTORY OF THE UNIVERSITY

The University of Scranton was founded as Saint Thomas College by Bishop William O'Hara, the first Bishop of Scranton, who had always hoped to provide an opportunity for higher education in the Lackawanna Valley. In 1888, with few resources at hand, he blessed a single block of granite as a cornerstone for his new college, which would admit its first students three years later. That first cornerstone is preserved in the wall of St. Thomas Hall near the Monroe Avenue entrance to the University.

The college was staffed by diocesan priests and seminarians until 1896 and then, for one year, by the Xaverian Brothers. From 1897 until 1942 the school, which was renamed The University of Scranton in 1938, was administered for the Diocese by the Christian Brothers. In the late summer of 1942, at the invitation of Bishop William Hafey, 18 Jesuits, led by Rev. Coleman Nevils, S.J., the newly appointed president, arrived on campus to assume control of the University.

The Jesuits restructured and strengthened Scranton's traditional and pre-professional programs with an emphasis on the liberal arts, which are the foundation for every program at a Jesuit university. This emphasis is intended to give students an appreciation for all disciplines as they develop specific subject knowledge.

The University has flourished under the Jesuits, growing from a primarily commuter school with fewer than 1,000 students to a regional, comprehensive university with a total enrollment of over 5,000 students in undergraduate, graduate, and non-traditional programs.

The 16-year tenure (1982-1998) of the University's twenty-second president, Rev. J.A. Panuska, S.J., marked a transformation of the University in many ways. 40 new undergraduate and graduate programs were added, and the University invested more than $110 million in the acquisition of additional buildings, the renovations of old buildings, the construction of 16 new buildings, and beautification of its campus. The most recent additions are McGurrin Hall, which houses The Panuska College of Professional Studies, and Brennan Hall, home of The Kania School of Management.

The academic quality and distinctive experience of a Scranton education have been recognized by consistent high rankings in such national publications as *U.S. News and World Report, Barron's Guide to the Most Prestigious Colleges*, *Peterson's Competitive Colleges*, and *The Barron's 300*. The University has also received national recognition for the high number of graduates who have received Fulbright and other prestigious international awards – 99 since 1972.

In July 1998, the Rev. Joseph M. McShane, S.J., became the University's twenty-third president. Under his guidance, the University will continue to build on its historical and educational heritage. It looks forward to a new century of service to the community, the nation and the world.

# THE CAMPUS

The University's 50-acre campus is located in the heart of Scranton, a community of 80,000 within a greater metropolitan area of 750,000 people. In the last 15 years, the University has built, renovated or expanded more than 20 buildings on campus.

The 398,726-volume Harry and Jeanette Weinberg Memorial Library at the center of campus includes a large study area open 24 hours a day with internet connectivity to the world. Loyola Hall of Science and St. Thomas Hall have highly specialized laboratories and equipment for the study of physics, electrical engineering, computing sciences, chemistry, biology and molecular biology. There is also a fully equipped television studio with editing facilities in the Communications Wing of St. Thomas Hall, along with the broadcast studios of WUSR-FM.

The John J. Long, S.J., Center and the adjoining William J. Byron, S.J., Recreation Complex have facilities for intercollegiate and intramural basketball, wrestling, handball, tennis, golf, racquetball, volleyball and swimming. Fitzpatrick Field is home to men's and women's soccer, lacrosse, and field hockey teams and its lighted artificial turf is also used for intramural and club sports.

Ten traditional residence halls, primarily for freshmen, at the core of the campus are centered on terraced quadrangles. Francis E. Redington Hall and John R. Gavigan Hall provide housing for upper-class students and the University also maintains a series of houses and apartment buildings in the vicinity of campus, some of which are organized around academic interests. In all, there are more than 30 housing options for students, who are guaranteed University housing for four years.

Performance and rehearsal space for the University Bands and Choirs is in the Houlihan-McLean Center, and the McDade Center for Literary and Performing Arts includes a "black box" studio theatre and a 300-seat main theater, classrooms, a writing laboratory, and offices for the English Department. The Eagen Auditorium in the Gunster Memorial Student Center is used for performances, lectures and formal and informal University events.

McGurrin Hall houses The Panuska College of Professional Studies, and contains classrooms, laboratories, an academic advising center, and offices for the departments of Counseling and Human Services, Education, Health Administration, Human Resources, and Nursing. Physical Therapy and Occupational Therapy classrooms and laboratories are in adjoining Leahy Hall.

The Conference and Retreat Center is located 15 miles north of the campus on Chapman Lake. Brennan Hall, scheduled to open in 2000, will house The Kania School of Management.

Other notable campus buildings include The Estate, former residence of the Scranton family; Campion Hall, built by the Society of Jesus for its members in Scranton; The Center for Eastern Christian Studies with its 150,000-volume library, rare-book collection and Byzantine Rite Chapel; and Kathryn and Bernard Hyland Hall, which houses classrooms and the University Bookstore.

# THE MISSION STATEMENT OF THE UNIVERSITY OF SCRANTON

**Historical Prologue:**

A comprehensive, co-educational institution, The University of Scranton is, by tradition, choice and heartfelt commitment, a Catholic and Jesuit university. Founded in 1888 as Saint Thomas College by the Most Reverend William G. O'Hara, D.D., the first bishop of Scranton, it achieved university status in 1938, and was entrusted to the care of the Society of Jesus (the Jesuits) in 1942.

**The Mission of the University:**

The University of Scranton is a community of scholars whose ministry of education is informed by the vision of life contained in both the Gospels and the Spiritual Exercises of Saint Ignatius Loyola. The University is therefore dedicated to freedom of inquiry, the pursuit of wisdom, integrity and truth, and the personal growth and development of all who share in its life and ministry.

**The Character of the University:**

**As a Catholic university,** The University of Scranton sees in the teaching and example of Jesus Christ the primary source for the values and attitudes that imbue the culture of its campus. Thus, it seeks to communicate the fullness of the Catholic intellectual tradition to its students in a systematic way. Moreover, in the ecumenical spirit that it has manifested since its founding, the University invites faculty, staff and students from other religious traditions to share in its mission.

**As a Jesuit university,** The University of Scranton provides its students with a nurturing environment in which a value-laden curriculum challenges them to develop:

– a commitment to the value system contained in the Gospels,
– a principled respect for the dignity of the human person,
– a devotion to justice,
– a dedication to the service of the poor,
– a love of truth and a restless passion for learning.

Convinced that the search for truth necessarily involves the search for God, the University also provides its students with opportunities for worship and spiritual development, and for the academic study of theology, religion and religious experience.

**As a university dedicated to education in the liberal arts,** The University of Scranton requires that all of its students complete a rigorous curriculum designed to foster the development of their analytical and critical abilities. Thus, the core curriculum of the University seeks to impart to students a knowledge of scientific principles, methods and skills, an appreciation of literary and artistic expression, an awareness of historical perspectives, and an understanding of religious, philosophical and moral values.

**As an urban American university,** The University of Scranton is dedicated to educating "men and women for others" from a wide variety of backgrounds whose lives and talents will enrich the life of the human family. The University is committed to enrolling a culturally and racially diverse student body from all areas of the country and the world. In fulfillment of its mission, the University further seeks to attract faculty members from richly diverse backgrounds who share its commitments to excellence in teaching and research, to "cura personalis" (a loving concern for students), and to the incarnational vision of human life that informs its ministry.

**As a comprehensive university,** The University of Scranton offers certificate and degree programs on both the undergraduate (associate and baccalaureate) and graduate (master's) levels to traditional and non-traditional students. Moreover, in order to prepare them for careers in a variety of fields, the University offers its students a wide range of professional and pre-professional programs of study.

**As the oldest and largest university in Northeastern Pennsylvania,** The University of Scranton is firmly committed to serving the people of the region. This commitment is manifested in a special way through the University's dedication to the education of future leaders for the area's professional, political, religious, cultural and business communities.

Throughout its history, the University has been distinguished by its commitments to liberal arts education, excellence in teaching and the quality of care that it lavishes on its students. As it moves into the new millennium, the University reaffirms its commitment to these qualities and invites venturesome scholars and students to join in its mission in the service of wisdom, integrity and truth.

## A FACULTY OF TEACHERS AND SCHOLARS

Over 250 faculty and administrators participate in the University's educational enterprise. They hold degrees from 135 different universities in 30 countries on five continents. Cambridge and the University of London in England; Louvain and the Gregorian in Europe; the University of Calcutta in India, Sophia University in Japan, Soochow University in China; Berkeley, Yale, MIT, Notre Dame, Harvard and Georgetown in America — all are represented among the faculty.

By its nature and function, a university faculty constitutes the most cosmopolitan element in a community. Hindu and Muslim, Christian and Jew, ministers and rabbis — scholars and teachers all — are found on the University's faculty.

The Jesuit tradition is carried on at the University not only by the 25 Jesuits engaged in teaching or administration, but by the fact that almost half of the faculty hold at least one degree from a Jesuit college or university.

As indicated in the Statement of Mission, excellent teaching and scholarship are regarded as complementary at this institution. Evidence of the latter is seen in the fact that numerous faculty serve on editorial boards of national and international journals, and two have served as principal editors — Prof. David Friedrichs, Legal Studies Forum; and Dr. John Norcross, Journal of Integrative and Eclectic Psychotherapy. Further, Fr. Richard Rousseau, S.J., is the founding editor of Ridge Row Press, which in 1988 expanded to become the University of Scranton Press and which specializes in philosophical and theological publications.

The University Directory near the end of the catalog presents more detailed information about the faculty.

## STUDENT DIVERSITY AND PARTICIPATION

As our faculty come from around the world, so do our students. Twenty-seven states and twenty-two foreign countries are represented in the University's student body of 5,000. In turn, through the Fulbright and Foreign Study programs, University of Scranton students matriculate at such foreign universities as Leuven, Madrid, Tubingen, Mainz, Oslo, Fribourg, Cologne, Salamanca, Lancaster, Berne, Strasbourg, the Sorbonne and University College, Dublin. This interchange of students contributes to the diversity and intellectual life of the University.

Much of the work in this university community is accomplished through student input. Considerable scientific research at the University is done by undergraduate students in the laboratories and in the field. With faculty assistance, the University newspaper and yearbook are edited and managed by students and students publish articles and abstracts in national scholarly journals. Students work in the public-relations and admissions offices, computer center, as resident assistants in the dormitories, as research assistants and interns for deans and the registrar. Similarly, they participate in the University's decision making. Seven students are elected by the student body to serve on the University Senate. Others serve with departmental chairpersons and faculty on the Conferences which recommend to the Deans changes in academic programs. Students also serve with other members of the University community on the various search committees which recommend candidates for the principal administrative posts from President to Dean.

## ALUMNI SOCIETY

The University of Scranton Alumni Society provides a way for graduates to continue their participation in the life of the University after their student years. Its 20 alumni chapters and affiliates include over 30,000 members. The Society, which is governed by elected offi-

cers and a 28-member Board of Governors, fosters communication among alumni and encourages continued dialogue between alumni and the University community. It hosts alumni functions, including reunions and homecomings, and promotes the interests of the University by identifying prospective students, assisting the placement of graduates, collecting and preserving materials for University history, encouraging networking among its membership, providing numerous services and benefits, performing community service projects, and honoring student, faculty and alumni accomplishments. These activities are coordinated through the office of alumni relations on campus.

The excellent record of Scranton alumni in gaining acceptance to professional schools , including the nation's most prestigious, is documented in the Health Professions and Pre-Law sections later in this catalog.

# INDICES OF QUALITY AND ACHIEVEMENT

## PROMINENT GRADUATES

Working with dedicated faculty and staff to maximize their potential, students at The University of Scranton become achievers. Of the more than 30,000 alumni, the following might in particular be mentioned:

Patrick Cardinal O'Boyle ('16), archbishop of Washington; Michael J. Eagen, Sr. ('27), chief justice of the Pennsylvania Supreme Court; Dr. Clarence Walton ('37), first lay president of The Catholic University of America; Hon. John D. Butzner ('38), judge, U.S. Circuit Court of Virginia; Joseph Ostrowski ('38), major league pitcher, New York Yankees (1948-52); John C. Keeney, Esq. ('47), deputy assistant attorney general, U.S. Department of Justice; Arthur W. Brown, Ph.D. ('37), former president of Marygrove College and Adelphi University; Joseph J. Loferski, Ph.D ('48), physicist and pioneer in the development of solar cells currently used in items from portable calculators to commercial satellites; Joseph Austin ('52), president/chief executive officer, General Life Insurance, Chicago; Gerard R. Roche ('53), chairman of the board, Heidrick and Struggles, Inc.; Robert F. Pugliese, Esq. ('54), executive vice president, Legal and Corporate Affairs, Westinghouse Electric Corporation; Claude R. Martin, Jr. ('54), professor of marketing, School of Business Management, University of Michigan; Dr. Glynn Lunney ('55), chief of the Flight Director's Office for the National Aeronautics and Space Administration, lead flight director for historic moon flights of Apollo 11 through 15; Dominic Cossa ('57), leading baritone, Metropolitan Opera; Maj. Gen. John Herrling ('60), secretary, American Battle Monument Commission; Jason Miller ('61), winner of the 1973 Pulitzer Prize in Drama for *That Championship Season* and "Oscar" nominee for his role in *The Exorcist*; Paul Montrone ('62), president and managing director of the Henley Group, Inc., a Fortune 500 Company; Hon. Michael J. Collins ('62), State Senator, Maryland; Francis J. Castellino, Ph.D. ('64), dean of the College of Science, University of Notre Dame; Gene Gibbons ('64), former chief White House correspondent; Edward J. Lynett ('65), publisher, *Scranton Times/Scranton Tribune* newspapers; James J. Loftus, M.D. ('66), director/part-owner of Emergency Medicine, Cedar Sinai Hospital, Los Angeles; John A. Walsh ('66), executive director, ESPN; Walter J. Bobbie ('67), Broadway musical director and Tony Award winner; Christopher Condron ('70), president and chief executive officer, Mellon Bank and Dreyfus Corporation; Stanley Wojewodski, Jr., Ph.D. ('70), dean, Yale School of Drama; William J. Wilkinson ('71), senior vice-president, human resources, Walt Disney Company; Gene J. Terruso ('74), chief executive, American Academy of Dramatic Arts; Susan Swain ('76), executive vice-president and co-chief operating officer, C-SPAN Cable Network; Dennis Size ('76), Emmy Award winning television lighting director; Debra Langan ('78), vice-president, American Express; and John J. Lynch, III ('83), executive vice president and

chief operations officer, St. Luke's Hospital and Medical Center, Houston, TX.

## TRUMAN AND OTHER NATIONAL SCHOLARSHIPS

In recent years students from the University have won a number of highly competitive national fellowships, including those offered by the Mellon Foundation, the Danforth Foundation, the National Science Foundation and the Harry S. Truman Memorial Foundation. Most remarkably, two sisters, Maria Mascaro (1984) and Carla Mascaro (1987), were both awarded four-year Truman scholarships. In 1988 Alice Batt, a double major in English and philosophy, won a summer study grant through the National Endowment for the Humanities.

## BACCALAUREATE SOURCE OF Ph.D.s

Achievement is also recognized in a recent study of the Office of Institutional Research at Franklin and Marshall College which showed that over a 75-year period (1920-1995), The University of Scranton ranked 22nd out of 254 four-year, private, master's-degree-granting institutions as the baccalaureate source of Ph.D.s in all fields.

## RETENTION AND DEVELOPMENT OF STUDENTS

The Mortenson Research Seminar on Public Policy national research team has concluded that some colleges, including The University of Scranton, are far more successful than others at encouraging students to do better academically than their high school grades or SAT/ACT scores alone may predict.

The team which conducted the study attributes the differences between predicted and actual graduation rates to internal institutional factors.

The University of Scranton placed 39th among 1,100 American colleges and universities ranked by the difference between the predicted and actual number of freshman students graduating in six years. The University's 84 percent institutional graduation rate in 1995 was 17.5 percent higher than statistical predictions based on external influences like grade and test scores, average student age, or off-campus vs. on-campus resident status.

The University of Scranton was among the 160 colleges and universities in the country whose graduation rate was more than 10 percent above predicted levels. Researchers found that "a substantial number" of Catholic colleges and universities appeared near the top. Even so, The University of Scranton ranked higher than any of the other 27 Jesuit colleges and universities in the United States.

Since 1994, *U.S. News & World Report* has named the University among the top ten comprehensive universities in the North (the most competitive by its annual survey of "America's Best Colleges"). The University has consistently been included in the U.S. News rankings since they were first introducted in 1983.

In recognition of its work as a values-centered institution, the University is one of 100 American schools named to the John Templeton Foundation's *Honor Roll of Colleges That Encourage Character Development.* The foundation made special note of the integration of academics and student life as expressed in the University's curriculum and co-curricular activities, mentioning especially the Freshman Seminar, Collegiate Volunteers, Campus Ministries and the peer counseling and education programs in the Wellness Center.

# FULBRIGHT AND OTHER INTERNATIONAL FELLOWSHIPS

Over the last 29 years 99 Scranton students have accepted grants in the competitions administered by the Institute of International Education (Fulbright) and International Rotary. In 1996, the fiftieth anniversary of the Fulbright Program, many of these former students returned to Scranton to celebrate the University's remarkable success in the competition for prestigious Fulbright Fellowships—the U.S. Government's premier scholarship for foreign study and research.

To date, two Scranton students have been awarded Fulbright Fellowships for the 2000-2001 academic year. Lisa Angelella, who double majored in English and philosophy, is a Fulbright Fellow at the University of Mumbai in Bombay, India, where she is examining the innovative uses of English in contemporary Indian poetry. Amy Patuto, who majored in secondary education, is spending the year teaching English as a second language as a Fulbright Teaching Assistant in South Korea.

Three Scranton students spent the 1999-2000 academic year on Fulbrights. As a Fulbright Fellow to Japan, Alison Glucksnis, a double major in biology and mathematics, pursued ecological research at the National Institute for Environmental Studies inTsukuba. Katherine Roth, a double major in biology and philosophy, conducted research on the detection of genetically modified tomatoes in processed foods as a Fulbright Fellow at the University of Nottingham in England. The third student, Christopher Warren, who majored in Spanish, used his Fulbright to Guatemala to research the role of language and education in cultural change among the Maya in Antigua, Guatemala.

Dr. Susan Trussler of the Economics/Finance department is the University's Fulbright Program Adviser.

# AWARDS FROM INSTITUTE OF INTERNATIONAL EDUCATION FULBRIGHT PROGRAM AND INTERNATIONAL ROTARY, 1980-2000

| | | |
|---|---|---|
| 1980 | Veronica Cardiff | Germany |
| | Stephen Carlin | Chile |
| | Michael Corbley | Switzerland |
| | Maryann L. Heckman | Uruguay |
| | Helen Hricko Haney | Germany |
| 1981 | Patrick Cumberland | Uruguay |
| | Arlene Drack (ITT) | Norway |
| | Deborah Krzywiec | Germany |
| | Irene Mlodzinski | Switzerland |
| | Mark Wisniewski | Switzerland |
| | Brian Wynne | Germany |
| 1982 | Michael Kondracki | Peru |
| | Bernadine Brennan-Moglia (ITT) | Finland |
| | Kathleen Flanagan | Belgium |
| | Joseph Piccirilli | Germany |
| | Howard Sorensen | Uruguay |
| | Elizabeth Veca | Switzerland |
| | Leon Xavier Zawacki | Germany |
| 1983 | Erin Brennan | Germany |
| | Patrick Davies (ITT) | Chile |
| | Peter Regeski | France |
| | Joseph Tuncavage | Switzerland |
| | Christopher Wahren | Germany |
| 1984 | Robert Conforti | Switzerland |
| | Kathleen Flanagan | France |
| | Colette Mazzucelli | Switzerland |
| 1985 | John Beltrami | Switzerland |
| | Michele Gieger | Germany |
| | Marguerite Pedley | New Zealand |
| | Louise Vogel | Germany |
| 1986 | Margaret Husosky | New Zealand |
| | James Lavelle | Thailand |
| | Christopher Montone | Honduras |
| | Robert Rabecs | Philippines |
| | Janet Schubert | Belgium |
| | DeLoris Spegar | Singapore |
| | Roy Whitman | Switzerland |
| | Ann Marie Laskiewicz Ross | South Africa |
| 1987 | Susan Conway | Germany |
| | Kathleen Gallagher | Nepal |
| | Margaret Keen | France |
| | Kevin Wright | Finland |
| 1988 | Michel Aboutanos | Switzerland |
| | Jeffrey Gabello | Germany |
| | Christine O'Brien | Kenya |
| | Mary Yuen | Singapore |

| | | |
|---|---|---|
| 1989 | Kim Marie Newak | Germany |
| 1990 | Caroline Parente | Uruguay |
| 1991 | Daniel Jurgelewicz | Finland |
| | Thomas Spoto | Singapore |
| 1992 | Maureen Cronin | South Korea |
| | Alissa Giancarlo | Germany |
| | Thomas Kish | Hungary |
| | Jennifer Murphy | Denmark |
| | Neal Rightley | Germany |
| | Salvatore Tirrito | Finland |
| | Denise Udvarhely | New Zealand |
| 1993 | Timothy Gallagher | New Zealand |
| | Susan Kavalow | South Korea |
| | Jennifer Kelly | Uruguay |
| | Alan Landis | Colombia |
| | Beth LiVolsi | Italy |
| | Colleen McInerney | Australia |
| | Jennifer Seva | Argentina |
| 1994 | Margaret Mary Hricko | Spain |
| | Terrence Kossegi | Pakistan |
| | Karis Lawlor | Germany |
| | Brian Zarzecki | Namibia |
| 1995 | Jason Cascarino | New Zealand |
| | Jeffrey Greer | Sri Lanka |
| | Renee Kupetz | Germany |
| 1996 | Robert Brennan | Israel |
| | Michael Pagliarini | France |
| | Michael Tracy | New Zealand |
| 1998 | Kevin Bisignani | Germany |
| | Jennifer Cahill | Japan |
| | Matthew Pierlott | South Korea |
| | Karen Towers | Mauritius |
| 1999 | Alison Glucksnis | Japan |
| | Katherine Roth | United Kingdom |
| | Christopher Warren | Guatemala |
| 2000 | Lisa Angelella | India |
| | Amy Patuto | South Korea |

# HONOR SOCIETIES

Those National Honor Societies which are represented in The University of Scranton are listed below in order of the foundation of the local chapters. An asterisk (*) after the name indicates that this national honor society is a member of the Association of College Honor Societies.

## ALPHA SIGMA NU*

The National Jesuit Honor Society was founded in 1915 with chapters in 28 Jesuit universities throughout the United States. The Scranton chapter was founded in 1943, the oldest Honor Society in the University. It is the only Honor Society open to students and faculty in all disciplines and all colleges of the University. Its admission standards are the most rigorous. The Greek letters signify adelphotes skolastikon nikephoron – brotherhood of honor students. Juniors and seniors who have distinguished themselves in scholarship, loyalty and service are eligible for membership. Appointment is made by the president of the University on the recommendation of the moderator and nomination by chapter members of the Society. From 1982-1985, Dr. William Parente, professor of political science, served as national president of the 20,000-member organization.

The Society annually presents the Alpha Sigma Nu University award for teaching. The recipients of the Award:

1969 Prof. Lawrence Mann †
1970 Prof. Frank Brown †
1971 Prof. Thomas Garrett †
1972 Prof. Michael DeMichele
1973 Prof. Bernard Williams
1974 Rev. Bernard Suppe, S.J.
1975 Rev. Edward Gannon, S.J. †
1976 Prof. Robert A. Sallavanti
1977 Prof. John P. McLean †
1978 Prof. Charles J. Thoman
1979 Prof. Urban von Wahlde
1980 Prof. J. Brian Benestad
1981 Atty. John J. McGee
1982 Prof. Harold Baillie
1983 Prof. E. Springs Steele
1984 Prof. John Earl †
1985 Prof. Michael C. Cann
1986 Prof. Joseph T. Evans
1987 Prof. Richard Klonoski
1988 Rev. Ronald H. McKinney, S.J.
1989 Prof. Stephen Whittaker
1990 Prof. Brian W. Carpenter
1991 Prof. Susan Mathews
1992 Prof. Willis M. Conover
1993 Prof. Robert L. McKeage
1994 Prof. Robert E. Hueston
1995 Prof. Gary E. Mattingly
1996 Prof. Kathleen G. Dwyer
1997 Prof. William Rowe
1998 Prof. Mary Anne Foley, C.N.D.
1999 Rev. Robert J. McTeigue, S.J.
2000 Prof. Thomas P. Hogan

## PHI ALPHA THETA*

International Honor Society in history founded in 1921. Basic requirements: 12 credits in history; grade-point average of 3.33 in history and overall ranking in top 35% of class. The Mu Rho chapter was established at the University in 1967.

## SIGMA PI SIGMA*

National Honor Society in physics for undergraduate and graduate students, founded in 1921. Its chapters are restricted to colleges and universities of recognized standing which offer a strong physics major. The University's chapter was founded in February 1969.

## OMICRON DELTA EPSILON*

National Honor Society in economics. Basic requirements: 12 credit hours in economics with an overall grade-point average of 3.0 and a 3.0 average in economics. The University's Xi chapter of Pennsylvania was founded in May, 1969.

## PSI CHI*

National Honor Society in psychology founded in 1931. This organization has chapters in 937 colleges and universities in all 50 states. The University's chapter was installed in May 1969. Minimum qualifications include a major or minor in psychology, rank in the top 35th percentile in general scholarship, and superior scholarship in psychology.

## PHI DELTA KAPPA

International professional fraternity for men and women in education. Membership is limited to graduate students and teachers. The University's chapter was founded in 1970.

## PI GAMMA MU*

International Honor Society in social science. Founded in 1924 to improve scholarship in the social sciences and to encourage inter-disciplinary study. Basic requirements: at least 60 hours of academic work, an overall grade-point average of at least 3.25, with at least 21 hours in the disciplines of economics, human services, psychology, sociology, political science or history with a grade-point average of at least 3.33. The University's chapter was founded in 1971.

## ALPHA SIGMA LAMBDA

National Honor Society to encourage scholarship and leadership among adult students in continuing higher education. The Alpha Upsilon chapter was installed at the University in 1972.

## ETA SIGMA PHI

National Honor Society for students of classical languages. The University's Epsilon Gamma chapter was founded in November, 1972.

## PI MU EPSILON

National Honor Society for mathematics majors in junior or senior year with a grade-point average of 3.0 and a 3.0 average in mathematics. The University's Mu chapter was installed in February, 1973.

## ALPHA MU GAMMA

National Honor Society for students of foreign languages. Founded in 1931. The Greek letters signify *amphi mouse glosson*: for the muse of languages. The University's chapter of Theta Iota was installed in May, 1973.

## DELTA SIGMA RHO-TAU KAPPA ALPHA*

National Honor Society in forensics. Founded in 1963 through merger of societies founded in 1906 and 1908 respectively. The University's chapter was installed in 1975.

## PHI LAMBDA UPSILON

National Honorary Chemical Society established in 1899. The University's Beta Kappa chapter, one of 60 chapters nationwide, was installed in October, 1975. For students with 24 credits in chemistry and a 3.0 grade-point average.

## ALPHA EPSILON DELTA*

The National Premedical Honor Society founded in 1926. The University's Iota chapter was installed in May, 1976.

## THETA ALPHA KAPPA*

National Honor Society in theology and religious studies founded in 1976 at Manhattan College. The University's Alpha Nu chapter was installed on April 4, 1980. Membership requires 12 credits in theology with a 3.5 grade-point average.

## SIGMA TAU DELTA*

National Honor Society in English founded in 1924. This organization is for students who major or minor in English with a grade-point average of 3.5 in English and 3.4 overall. The University's Mu Omicron chapter first met on April 30, 1980.

## ALPHA EPSILON ALPHA

An honor society founded on April 30, 1980, at The University of Scranton to recognize students who excel in the field of communications. For communication majors with a 3.5 grade-point average.

## ALPHA KAPPA DELTA*

International Honor Society for Sociology students founded in 1920. Requirements include 18 credits in Sociology with a grade-point average of 3.0 overall. The University's Upsilon chapter was founded here on May 8, 1980.

## SIGMA XI

International Honor Society in scientific research founded in 1886. The University's chapter was chartered in 1968 and has been authorized since 1979 to induct as associate members undergraduate or graduate students showing outstanding promise in original research.

## PI SIGMA ALPHA*

National Honor Society in political science founded in 1920. The Kappa Iota chapter at the University was installed on May 9, 1980. Membership limited to students with at least 10 credits in Political Science, a grade-point average of at least 3.0 in these courses, and overall rank in the upper third of the class.

## ALPHA PHI SIGMA*

The National Criminal Justice Honor Society founded in 1942. The University's Epsilon Zeta chapter was installed in May 1982. Basic requirements: 18 credits in criminal justice; an overall grade-point average of 3.2; a 3.2 grade-point average in criminal justice.

## PHI SIGMA TAU*

National Honor Society for students of philosophy. The University's Tau chapter was installed in May 1982.

## OMEGA BETA SIGMA

The Business Honor Society for women founded at The University of Scranton in 1982. Basic requirements: at least sophomore standing, Business as a major or minor and a grade -point average of 3.25.

## UPSILON PI EPSILON

National Computer Science Honor Society. The University's Gamma chapter was chartered in the spring of 1985.

## SIGMA THETA TAU*

International Honor Society of Nursing was founded in 1922 and is a prestigious organization of nurse leaders, scholars and researchers. Requirements: completion of one half of the curriculum, demonstrated ability in nursing, a grade-point average of 3.0 and rank in the upper one-third of the class. The University's Iota Omega Chapter was chartered in April 1988.

## KAPPA DELTA PI

The International Honor Society for education established in 1911, the Sigma Chi chapter was installed here at The University of Scranton in 1992. It joins over 500 chapters from around the world in dedication to the ideals of fidelity in Humanity, Science and Service, and Toil.

## BETA BETA BETA

National Honor Society for biology founded in 1922. The University's chapter, established in 1994, is one of 372 chapters nationwide. The society encourages undergraduate biological research through presentations at conventions, publication in the journal BIOS, and research/travel grants. All undergraduate students interested in biology may join as associate members. A regular member must be a junior or senior with 3.0 grade-point average in at least three biology courses (one upper level) and in good academic standing at the university.

## SIGMA PHI OMEGA

The National Honor Society in gerontology. Founded in 1980, its purpose is to recognize those students who excel in gerontology as well as professional aging-service personnel. The University's Gamma Epsilon chapter was established in April, 1997. Membership is open to students who have at least eighteen credits completed in gerontology/aging studies with a grade-point average of 3.3.

## BETA GAMMA SIGMA*

Beta Gamma Sigma is the only business honor society recognized by the AACSB, the International Association for Management Education. Basic requirements: ranking in the top 10% of the class with a major in business and management programs. The University's chapter of Beta Gamma Sigma was chartered in spring, 1997.

# Undergraduate Admission
# Expenses
# Financial Aid

The University of Scranton is a selective institution in the Jesuit tradition. The University makes available to qualified students an excellent education and it offers significant scholarships and programs of financial aid.

## ADMISSION

The Admissions Committee of The University of Scranton will make the final decision on applications for admission. In reaching this decision, the committee will consider a number of factors: demonstrated evidence of a student's academic ability, intellectual curiosity, strength of character and motivation; the student's high school record, class rank, and extracurricular activities; SAT and/or ACT scores and recommendations.

## STEPS IN MAKING APPLICATION

Requests for an application form and all correspondence dealing with admission to The College of Arts and Sciences, The Panuska College of Professional Studies or The Kania School of Management should be directed to:

DIRECTOR OF ADMISSIONS
THE UNIVERSITY OF SCRANTON
SCRANTON, PENNSYLVANIA 18510
Telephone: (570) 941-7540 Toll Free: (888) SCRANTON Fax: (570) 941-5928
Or apply online at http://www.scranton.edu

A non-refundable fee of $40.00 should accompany the application. Students should apply during the first semester of their senior year of high school. The early-action deadline is November 15th. For all applicants other than those in Physical Therapy, early-action offers will be made on December 15th. From that time on, all applications will be reviewed on a rolling basis with a four-week turn around and a preferred final application deadline of March 1st. All physical therapy applications must be completed and received by December 15th for a January 15th decision and a February 15th priority confirmation.

The application form should be completed and the entire form given to the guidance counselor of the high school who will forward high school grades and the completed forms to the University.

The SAT I: Reasoning Test (College Entrance Examination Board) or the ACT Test (American College Testing) is required of all applicants. These tests should be taken during the junior year and/or senior year of high school. During Summer Orientation, the University administers its own placement tests. Therefore, applicants are not required to take the SAT II.

A non-refundable class reservation fee of $150.00 is required of all accepted applicants. In addition, accepted resident freshmen will make a non-refundable room deposit of $150.00 upon notice from the Director of Admissions.

## REQUIRED HIGH SCHOOL PREPARATION

Students wishing to enroll in any of several undergraduate programs offered by the University must have completed a total of 16 or more high school academic units covering grades 9-12. The term "unit" means a high school course taught four or five hours weekly throughout an academic year of 36 weeks duration. Unit requirements and preferred distribution of secondary courses are given in the following table:

| HIGH SCHOOL UNIT | COLLEGE PROGRAM CHOICE | | | | | |
|---|---|---|---|---|---|---|
| | Arts | | Science, OT, PT,* or Engineering | | Business, Education, or Social Science | |
| | Req. | Pref. | Req. | Pref. | Req. | Pref. |
| English | 4 | 4 | 4 | 4 | 4 | 4 |
| History and Social Science | 2 | 3 | 2 | 3 | 2 | 3 |
| Foreign Language | 2 | 2+ | 2 | 2+ | 2 | 2+ |
| College Preparatory Mathematics | 3 | 4 | 4 | 4 | 3 | 4 |
| Science | 1 | 2+ | 3 | 3+ | 1 | 2+ |
| Other acceptable units | 4 | | 1 | | 4 | |
| TOTAL | 16+ | | 16+ | | 16+ | |

* In addition to four units of mathematics and single units in biology, chemistry and physics, Occupational Therapy and Physical Therapy applicants must submit documentation attesting to observation work done in their chosen fields.

Applicants without high school credit in modern languages may be accepted if they present 16 acceptable units. A single year of language in high school will not be counted as a unit to satisfy the requirements for admission.

Mathematics includes elementary, intermediate, and advanced algebra; plane and solid geometry; trigonometry, analysis, and any other college preparatory course. Applicants for science and engineering programs must include trigonometry and must have earned a grade of 85 in each mathematics course. Applicants for the nursing programs should include chemistry and biology in their high school program.

Science includes biology, chemistry, physics and other college preparatory courses. Pre-engineering applicants are urged to include physics in their high school preparation.

## ADVANCED PLACEMENT

Applicants who have taken college-level courses in high school may be placed in advanced courses and may be given credits as well. Students who have been accepted for admission and desire to apply for such placement must take the Advanced Placement Examination offered in May by the College Entrance Examination Board, Princeton, New Jersey 08540. Students can have their results send automatically to the University by providing the school code (2929). In most cases, a minimum scored of "3" (non science) or "4" (math/science) may earn advanced placement with 3-6 credits. Biology and Physical Therapy majors cannot receive biology credits.

## COLLEGE-LEVEL EXAMINATION PROGRAM

Through the CLEP tests, taken before admission, applicants may gain college credit in most academic subjects for work done outside the classroom in jobs, military service, etc., or in non-accredited institutions. For further information contact: College Level Examination Program, Box 1824, Princeton, New Jersey 08540. Students wishing to be con-

sidered for CLEP credits should take the CLEP examinations and have the results forwarded to the Director of Admissions.

## ACADEMIC DEVELOPMENT PROGRAM

Applicants who fail to meet all of the admission requirements may be considered for a special freshman-year Academic Development Program concentrating on English, logical thinking, reading skills and study habits, as well as work in the student's major field. Satisfactory completion of the ADP program will insure the student normal sophomore standing.

## SUMMER BRIDGE PROGRAM

The Summer Bridge Program assists students who have demonstrated achievement and a desire to attend college, but who need to improve their verbal skills. The University is committed to helping you to make those improvements. The Summer Bridge Program for incoming freshmen was established in 1964. Over the years it has been improved and strengthened.

Although all students can benefit from the Bridge program, each year we select those who we feel will profit from it most on the basis of a careful examination of high school transcripts, standardized test scores, letters of recommendation and extra-curricular activities.

The Bridge program will assist you in making the transition from high school to college and in the future development of your reading and writing skills. You will accomplish these goals in two ways. First, you will participate in a summer program developed exclusively for students in the Summer Bridge Program. Second, the program director will serve as a mentor assuring that there is a resource person available to you when needed.

Students accepted into the Bridge program have the potential to succeed here at the University. The University strives through the Summer Bridge Program to ensure that the potential you have as a student is achieved and that you graduate.

## STUDENTS WITH DISABILITIES

The University of Scranton complies with all applicable laws and regulations with respect to the accommodation of handicaps and disabilities as these terms are defined in law. The University will provide reasonable accommodations so students can fully participate in curricular and extracurricular activities. Students who need assistance should make timely contact with the Office of Diversity and Equal Opportunity (570) 941-6213.

## INTERNATIONAL STUDENTS

The University of Scranton has been educating international students for 47 years and remains committed to that tradition. At present, approximately 50 different countries are represented by undergraduate and graduate students.

The director of international student affairs, whose office is adjacent to the Graduate School in the Estate building, advises and counsels students in order to ensure a smooth transition to a new culture and educational system. The director is moderator of the International Student Association and coordinator of the Family Friendship Program. Selected families in the area participate in the Family Friendship Program and welcome individual international students by offering hospitality in many ways. The University has a house on campus that serves as a mosque for the use of Muslim students. It is available for daily prayers as well as the Friday prayer.

## HIGH SCHOOL SCHOLARS

High school students who have completed their sophomore or junior year with a minimum of a B+ grade average may take one University course each term until they graduate from high school. Courses may be taken for credit or for audit at a special tuition rate of $100 per credit.

Students may enroll for a maximum of three credits per session. Individual exceptions may be made if GPA/SAT scores substantiate the request. Registrations will be processed on a space-available basis. Students will be responsible for tuition and applicable fees.

Courses available are typical freshman-level courses that are accepted towards a University of Scranton degree. The current University of Scranton undergraduate catalog includes details regarding curricular requirements for University of Scranton degree programs. These courses generally transfer to other regionally accredited colleges and universities. However, the University of Scranton cannot guarantee transferability.

Five tuition grants are available during the summer to individuals with demonstrated financial need. Grants are limited to one course per individual per year, a $300 value.

A special orientation program will be held for students registered in the High School Scholars Program. Further information is available from the Office of Admissions, at (570) 941-7540, or Fax: (570) 941-5928.

## INTERNATIONAL BACCALAUREATE POLICY

The University of Scranton grants college credit for classes taken through a recognized International Baccalaureate (IB) program. Students can earn credit for up to three successfully completed higher level classes in which a score of "4" or higher is achieved on the appropriate IB examination. For more information on IB credit, contact the admissions office.

## TRANSFER STUDENTS

Students who wish to transfer to The University of Scranton must submit applications and the usual credentials: official high school records, SAT scores and transcript(s) from the college(s) attended. At the discretion of the Admissions Committee, students from other accredited colleges may be admitted provided: 1. The courses to be transferred are equivalent or comparable to courses offered at The University of Scranton; 2. Students are required to follow all requirements prescribed for the degree program at The University of Scranton. 3. No credit will be given for courses with grades less than "C". Transfer credit is reviewed on an individual basis. Students transferring are required to earn a minimum of 30 credits for an associate's degree or 63 credits for a baccalaureate degree at The University of Scranton. Special orientation sessions are held for transfer students. It should be noted that some departments require that at least half of the credits in the student's major be taken here at the University. This regulation applies to business majors only.

## VALIDATION OF BUSINESS TRANSFER COURSES

Students may validate courses by successfully completing one or more advanced courses in the subject for which the course in transfer is a foundation course. Approval is granted by the dean of The Kania School of Management. This applies only to lower-division transfer courses which the University offers at the upper-division level.

## STUDENT EXPENSES

### ROOM AND BOARD — POLICIES AND GUIDELINES

**Residence Life.** The University of Scranton Residence Life system is comprised of 13 freshman and 19 upper-class residences. Resident freshmen are normally assigned to freshman residence halls that offer support for their academic programs, personal development and leadership opportunities under the guidance of Residence Life staff, Jesuit counselors and faculty. Upper-class students may select from a range of housing options that includes attractive houses, apartment buildings, suite-style halls with semi-private baths, and traditional halls offering single and double rooms. Also, there is limited apartment-style housing available for graduate students.

**The University of Scranton requires all first- and second-year undergraduate students to live in campus housing. Exceptions to this policy are limited to students who reside with a parent, legal guardian or spouse; are 21 years of age or older; or present other documented extenuating circumstances. The admissions office will determine a student's residency status upon admission to the University.**

The University provides in-room access to the University's communication network (television, computer, and video, including instructional and commercial television) in all residence hall rooms and telephone service to rooms in University houses at no additional charge. This service includes unlimited local calling and voice mail for each room, as well as discounted long-distance rates for those enrolled in the University's long-distance program. In addition, light in-room housekeeping, 24-hour maintenance and 24-hour security are provided.

Students residing in off-campus housing (within a one-mile aerial radius of campus) can also have access to the University's communication services, including basic telephone service, voice mail/messaging service and long-distance service.

For more information regarding these communication services, contact the Office of Network Resources, St. Thomas Hall, Room 102, or call 941-6181.

Housing costs are based on the building to which each student is assigned. There are four housing plans: **Plan AA** applies to townhouses on Mulberry Street and Madison Avenue; **Plan A** applies to Gavigan College and Redington Hall and Mulberry Townhouses Double Rooms; **Plan B** applies to Cambria House, Casey Hall, Driscoll Hall, Gannon Hall, Lavis Hall, Leahy Hall, Luzerne House, McCormick Hall, McKenna House, Nevils Hall, Southwell House, Tioga House, McGowan House and all of the University theme houses; **Plan C** applies to Denis-Edward Hall, Fitch Hall, Hafey Hall, Hannan Hall, Jerrett Apartments, Lynett Hall, Martin Hall, McCourt Hall and Montgomery Apartments. **Please note that room and board charges are per semester. Even though the fee does cover intersession housing, an additional fee is assessed for any meal plan. No fees include vacation periods.**

**Dining Services.** Students have a choice of three cost-effective meal plans providing 19, 14 or 10 meals per week. The 19-meal plan provides three meals per day Monday through Friday, with brunch and dinner on Saturday and Sunday. The 14-meal plan provides any combination of 14 meals per week. The 10-meal plan offers students any combination of 10 meals per week. Meals are not served during vacation periods. All freshmen living in University housing must participate in the 19-meal plan during the entire freshman year. Upper-class residents living in Driscoll, Leahy, Redington and Gavigan Halls must participate in one of the three University meal plans. Meal-plan participation is optional for upper-class residents of Linden Plaza and the University houses and for commuters and students living in private housing. Discounted meal tickets are available for guests and students wishing additional flexibility.

**Contractual Obligations.** Once enrolled in a room and/or board plan, the student is obligated to that plan for the remainder of the academic year including intersession.

**Intersession.** Resident students taking one or more classes during intersession must live in University housing and, if applicable, continue their meal-plan program if they were enrolled for either room and/or board for the preceding fall semester. As noted above, additional fees do apply for meals. For reasons of safety and security, those not enrolled in classes during intersession are not permitted to reside in University housing. Student athletes approved to stay by the Office of Residence Life may, however, live in their rooms over intersession without taking classes.

## STUDENT IDENTIFICATION CARDS

Every student attending The University of Scranton must have a current Royal Card (photo ID). This card must be presented upon demand for student services, registration, and use of athletic facilities and the library.

The Royal Card is used for meals in the dining facilities, resident-hall access, photocopying in the library, and may be used in vending and laundry machines. A brochure describing the Royal Card account may be obtained at the Royal Card Office, St. Thomas Hall, Room 103 or by calling 941-7400. Student photos are taken Monday through Friday from 8:30 a.m.-10:30 p.m., or Saturday and Sunday from 9:00 a.m. to 10:30 p.m., at the Royal Card Office.

## TUITION PAYMENTS

Each semester an invoice displaying your courses, your room assignments, and your semester charges will be mailed to your mailing address. The tuition and fees are payable by the due date listed on the invoice. **A Remittance Form is attached to the bottom of the invoice. This Remittance Form must be returned with payment by the due date. Students paying their bills via AMS or with financial aid must also return the Remittance Form indicating their source of funding.**

Without exception, lab fees must be paid for all courses with a lab requirement. Also, the University Fee must be paid by all College of Arts and Sciences, Panuska College of Professional Studies and Kania School of Management students registered for courses.

No student shall be permitted to receive any degree, certificate or transcript of record until the financial account with the University has been settled.

## FAMILY TUITION REDUCTION

Whenever two or more dependent children from the same family are in attendance during the same semester at the University as full-time undergraduate students, the family tuition-reduction policy will apply. Also, whenever at least one dependent child in a family is in attendance at the University as a full-time undergraduate student and a parent is enrolled full-time as an undergraduate student, the tuition-reduction policy will apply. Students must be full-time undergraduate students enrolled in the University. The tuition deduction is equivalent to each student's semester tuition multiplied by 10%. The amount of tuition credit that will be awarded each semester for each student will be calculated after other financial aid has been applied by Bursar's Office. Forms and additional information may be obtained from the Bursar's Office. A completed form must be filed in the Bursar's Office each year to receive the reduction for that year.

## MONTHLY PAYMENTS

The University accepts monthly payment through participation with a professional agency, Academic Management Services (AMS). For application information, please call AMS at 1-800-635-0120. Brochures inviting family participation in a ten-month payment plan are mailed to parents of all incoming students by May of each year. Also, an enrollment form inviting family participation in a four-month semester plan will be included with the fall billing in July and the spring billing in December.

VISA and MasterCard will be accepted for tuition and fee payments. Please contact the

bursar's office located in 201 St. Thomas Hall, or telephone (570) 941-4062 for details.

TUITION INSURANCE

The University, through A.W.G. Dewar, Inc., provides the Tuition Refund Plan (TRP). The plan helps protect your educational investment. When combined with the University's published refund policy, reimbursement totaling 100% of tuition and room and board charges billed by the University will be made if you must withdraw from a term because of a personal illness or accident. In case of withdrawal due to a mental/nervous disorder, 60% of the above charges are covered. Application information is available from the bursar's office or you may call A.W.G. Dewar, Inc. at (617) 774-1555.

**TUITION AND FEES** ACADEMIC YEAR 2000-2001

**TUITION:** flat tuition per semester (Applied for the fall and spring terms to freshmen, sophomore, junior and transfer students with an admit term of fall 96 and thereafter)

*Physical Therapy Majors (12 to 18 credits) ..... $10, 280
All other Majors (12 to 18 credits) ..... $9,230

Per credit rate applied for course loads less than the 12-credit flat-tuition minimum credit load, or to credits in excess of the 18-credit flat-tuition maximum credit load .... $515

**TUITION:** per credit (Applied for the fall and spring terms to students with an admit term prior to fall 96) ..... $515
(Intersession-all students) ..... $515
(Summer Session-all students) ..... $431

* Note: The tuition charge for required intersession and summer courses taken by Physical Therapy majors is included in the fall and spring flat-tuition assessment.

**Tuition for Special Programs**—During their junior and senior years (fall and spring semesters), students in the Honors Program, the Special Jesuit Liberal Arts program, and the Business Leadership Program will be allowed to take up to 21 credits per semester at no additional charge above the flat-tuition rate.

**ORDINARY FEES**

University Fee per semester (fall and spring)
(for freshmen, sophomore, junior and transfer students with an admit term of fall '96 and thereafter) ..... $100
(for students with an admit term prior to fall '96) ..... $475
Health Fee per semester (fall and spring for students with an admit term prior to fall '96) ..... $65
Continuation Fee (in lieu of University Fee for students not in residence) per semester... $5
Medical Leave Fee per semester ..... $15
Reader (Individual Study) Fee, per credit, in addition to regular tuition ..... $30
Breakage Fee ..... Actual

FOR GRADUATING STUDENTS ONLY

Commencement/Yearbook Fee. ..... $190/$40

FRESHMEN/TRANSFERS

Orientation/Gateway Experience Fee ..... $230

**LABORATORY FEES**

**Science Departments**

Biology, per course, per semester ..... $100
Chemistry, per lab hour per semester ..... $40

Physics, per course, per semester ..... $75
Psychology, per course, per semester ..... $50
Medical Tech Intern, per semester ..... $125

**English Department**

Film Screen Fee, per course, per semester ..... $40
Writing Fee, per course, per semester
(excluding WRTG 105, 106, 107) ..... $25

**Communication Department**

Radio Lab Fee, per course, per semester ..... $50
TV Lab Fee, per course, per semester ..... $50

**History/Political Science Departments**

Film Screen Fee, History 212 & 218, per course, per semester ..... $30
European Union Simulation Fee, PS 331, per course, per semester..... $100

**Foreign Language Department**

Language Lab Fee, per course, per semester ..... $50

**Nursing Department**

Clinical Lab, per hour, per semester, undergraduate ..... $40
Clinical Lab, per clinical course, RN, NURS 481 and 490 ..... $110
Assessment Fee, Juniors, per lab hours, per semester ..... $40
Assessment Fee, Seniors, per lab hours, per semester ..... $50
NLN Mobility Examinations (RN students only; 3 exams) ..... $195

**Physical Therapy Department**

Clinical Lab, per hour, per semester ..... $40

**Occupational Therapy Department**

Clinical Lab, per hour, per semester ..... $40

**Music Department**

Music Fee (Music 111, 112, 219) ..... $30

**Art Department**

All Art Courses Lab Fee, per course, per semester ..... $70
All Art History Courses (except ARTH 140), per course, per semester ..... $30
Art/Music (ARMU 140) ..... $30
Art/Music (ARMU 141) ..... $45

## SPECIAL SERVICE FEES

Late Tuition Payment Fee ..... $100
Returned Check Fee ..... $25
Late Registration Free ..... $20
Requested Change of Schedule after Classes Begin ..... $15
Change of Major Fee ..... $15
Off-Campus Course Permission Fee ..... $25
Certified Transcript (per copy)
Currently Matriculated Students ..... $3
All Other Requests ..... $5

## ROOM AND BOARD FEE SCHEDULE:

Room Rent AA (per semester)—Townhouses on Mulberry Street (Single Rooms) ..... $2,750
Room Rent A (per semester) — Redington and Gavigan Halls, Linden Plaza
and Townhouses on Mulberry Street (Double Rooms) ..... $2,498
Room Rent B (per semester) — Theme Houses, Driscoll, Gannon, Lavis, McCormick,
Leahy, Luzerne, Nevils, Tioga, McGowan, Casey, Cambria ..... $2,362

Room Rent C (per semester) — Denis Edward, Fitch, Hafey, Hannan, Lynett, Martin, McCourt, Jerrett, Montgomery ..... $2,228

Room Damage Deposit ..... $200

Food Plan, 19-meal plan (intersession — $457.) semester ..... $1,694

Food Plan, 14-meal plan (intersession — $423.) semester ..... $1,559

Food Plan, 10-meal plan(intersession — $367.) semester ..... $1,329

Summer Room Charges(1st and 2nd sessions — $403.)"G" session ..... $553

University Housing Activity Fee (annual fee, all returning students) ..... $40

**REFUNDS**

If a student is authorized to withdraw with honorable standing from the University for a good cause, a written request may be made for reduced charges for tuition, board and room fees. (Note should be taken that the student may not demand a refund as a matter of right.) Ordinarily, laboratory and special service fees are not refundable.* Students who entered the University prior to fall 1996 and who withdraw from individual courses are also eligible to receive credit on their account with the University according to the schedule given below.

SCHEDULE OF REFUNDS

| **FALL/SPRING SEMESTER** | CREDIT |
|---|---|
| Before the first day of classes and | |
| To and including 10 calendar days | 100% |
| To and including 17 calendar days | 75 % |
| To and including 24 calendar days | 50% |
| To and including 31 calendar days | 25 % |
| Beyond 31 calendar days of the semester | no refund |
| **INTERSESSION/SUMMER SESSIONS** | CREDIT |
| Before the first day of classes and | |
| To and including 2 calendar days | 100% |
| To and including 4 calendar days | 50% |
| Beyond 4 calendar days of the session | no refund |

* Note: Students billed flat tuition (those entering the University in fall 1996 or later) will also be eligible for a refund if their total course load after the dropped course(s) falls below the flat-tuition minimum credit load, or their course load prior to dropping the course(s) was greater than the flat-tuition maximum credit load of 18 credits. The formula used to calculate refunds for students billed under flat tuition will be available from the Bursar's office.

**FEDERAL TITLE IV REFUND POLICY**

An exception to the above policy applies to recipients of Title IV federal student aid who completely withdraw from a term. Effective with the 1998 Reauthorization of the Higher Education Act, schools are required to calculate a pro rata amount of federal funds a student is allowed to keep to pay for educational expenses up to the 60% point in each payment period. Complete details are available in the Comprehensive Guide to Financial Aid Programs available in the Financial Aid Office.

# HEALTH INSURANCE

The University offers undergraduate students the opportunity to enroll in an attractive health insurance plan at the outset of each academic year. All students residing in University housing units must participate in the University's sponsored health program, unless written evidence is presented showing coverage under another health program (e.g. parent's health policy).

# SCHOLARSHIPS AND FINANCIAL AID

The University will help as many qualified students as possible to complete a college education. For this purpose the University maintains an Office of Financial Aid and all inquiries concerning such assistance should be made to the Director of Financial Aid, located in 401 St. Thomas Hall; Telephone (570) 941-7700; Fax (570) 941-4370. Assistance is also available on the web at http://www.scranton.edu or by e-mail: finaid@uofs.edu

# PROCEDURES FOR APPLYING FOR SCHOLARSHIPS AND FINANCIAL AID

1. Submit the University Application for Financial Aid or the CSS Profile form. Incoming students must complete and return the application by February 15th. Returning students must complete and return the application by April 15th.

2. Complete the Free Application for Federal Student Aid (FAFSA). Priority filing date for incoming students is February 15th; for returning students, April 15th. FAFSA forms are available from high school guidance officers and from the University of Scranton Financial Aid Office.

In order to be eligible for financial aid, students are required to maintain satisfactory academic progress. Standards have been established for federal and University financial aid that measure a student's progress toward a declared educational objective. These guidelines include a maximum time frame for completing a degree, a minimum percentage of credits completed each academic year and a minimum cumulative Grade Point Average. A brief explanation is provided below.

## CREDIT REQUIREMENTS

Full-time students are expected to complete their undergraduate degrees within six academic years. Part-time students are allotted a period of time that shall not exceed twelve academic years. Students enrolled in The College of Arts and Science, The Kania School of Management and The J.A. Panuska, S.J., College of Professional Studies who are full time students must successfully complete a minimum of twenty-four credits per academic year. Students enrolled in Dexter Hanley College as full-time students must complete a minimum of twenty-one credits, three-quarter-time students a minimum of fifteen credits, half-time students a minimum of nine credits and less-than-half-time students a minimum of six credits per academic year. Full-time dependent students who drop below 12 credits per semester may lose coverage under their parents' health insurance plan and may be required to begin repayment of student loans.

## ACADEMIC REQUIREMENTS

All students must maintain a cumulative grade-point average of 2.00 in order to demonstrate satisfactory academic standing. Academic scholarship recipients are required to maintain a cumulative grade-point average of 2.50, 3.00 or 3.25 depending on the scholarship.

Students should consult the Comprehensive Guide to Financial Aid for a full definition

of Satisfactory Progress Standards and the appeals process. Copies are available at the financial aid office.

The following financial-aid programs are available:

## LOANS

**FEDERAL PERKINS LOAN PROGRAM.** The University administers this Federal program which provides 5% interest loans to needy students. A Free Application For Federal Student Aid (FAFSA) is required of all loan applicants.

**FEDERAL STAFFORD LOAN PROGRAM** is available in cooperation with community banks, credit unions, and savings and loan associations. The University of Scranton's preferred lender is PNC Bank. Freshmen may borrow a maximum of $2,625, sophomores - $3,500, and juniors and seniors - $5,500 per academic grade level. The aggregate maximum for undergraduate study is $23,000. Depending on their grade level, independent students may borrow $4000-$5000 in unsubsidized Stafford loans. The financial aid office will pre-certify a loan up to the maximum grade level amount.

**FEDERAL PLUS PARENT LOAN** is available for parents of dependent students. Creditworthy parents are able to borrow up to the difference between a student's cost of attendance and total other financial aid. Additional details and applications are available from community lending institutions.

**THE PENNSYLVANIA HIGHER EDUCATION ASSISTANCE AGENCY** has been designated by the General Assembly to administer the State Grant Program. Students may be awarded from $200 to $3,100 per year. A FAFSA must be filed by May 1.

**FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT** is a federal campus-based program administered by the University. Amounts may range from $200-$2,500 per year to students who demonstrate exceptional need. Priority is given to Pell recipients. A FAFSA is required for this program.

**THE FEDERAL PELL GRANT** provides federal grants, ranging from $400 to $3,300 per academic year, based on financial need. A FAFSA is required.

**UNIVERSITY OF SCRANTON AWARDS**

The University offers a number of awards based on academic merit and financial need. All accepted freshmen are automatically evaluated for scholarship aid. In order to be considered for need-based aid, students must file a FAFSA and either the University Application for Financial Aid or the CSS Profile.

**OTHER PROGRAMS:**

*THE FEDERAL WORK-STUDY PROGRAM* is a federal campus-based program that provides employment during the academic year and in the summer for students demonstrating financial need. The majority of the jobs are on-campus positions in various departments and administrative offices. Some jobs, both on and off campus, involve community service. Students seeking campus employment must file a FAFSA and Work-Study Application.

*VETERANS BENEFITS* — Veterans and eligible dependents should consult their local Veterans Administration counselor in order to establish their eligibility for participation. The Office of the Registrar certifies enrollment for eligible veterans with the Veterans Administration (VA form 22-1999).

*U.S. ARMY ROTC SCHOLARSHIPS* are available. For more information, please contact the military science department in Rock Hall (ph. 941-7457 or 941-6336).

*The UNITED STATES AIR FORCE RESERVE OFFICER TRAINING CORPS* offers many two- to five-year full-and partial-tuition scholarships for which qualified students may compete if they enroll in U.S. Air Force ROTC. Certain qualified students may also be eligible for a tax-free stipend of $150 a month. All graduating students who successfully complete the AFROTC program receive commissions as second lieutenants and will serve on active duty in the United States Air Force. For more information, contact the Aerospace Studies Department at 1-800-945-5378, ext. 4860.

*OFFICE OF VOCATIONAL REHABILITATION* under the Pennsylvania Department of Labor and Industry provides help to qualified students. Residents of other states should inquire about similar programs available in their states of residency.

# SCHOLARSHIPS

Each year the University offers merit scholarships which are based on a student's high school record of academic achievement. These scholarships include both President's (full tuition) and Dean's (partial tuition) scholarships. Scholarship application procedures are outlined in the University Viewbook.

## SCRANTON PREPARATORY SCHOOL SCHOLARSHIP

This four-year, full-tuition scholarship, initiated in 1947 by the president and board of trustees of the University, is given to a graduate of the Scranton Preparatory School in honor of the following (the name of the scholarship, rotates from year to year):

**THE MOST REV. RAYMOND A. LANE, D.D., SCHOLARSHIP (1994-1998)**
— to Laura M. Novak

**THE MOST REV. WILLIAM J. HAFEY, D.D., SCHOLARSHIP (1995-1999)**
— to Mary Ellen Donohue

Selection of the recipient is on the basis of academic achievement, qualities of leadership, service to the Preparatory School, and recommendation of the president and the dean of studies of the Preparatory School.

## PRESIDENTIAL SCHOLARSHIPS

The awarding of Presidential Scholarships provides a unique opportunity to recognize individuals who have served this institution as trustees, faculty, staff or friends.

### 1996-2000 Presidential Scholarship Recipients

**THE DR. AND MRS. ARTHUR FURMAN SCHOLARSHIP**—to Lisa A. Angelella of Harding, Pennsylvania (Wyoming Area High School).

**THE WILLIAM R. LYNETT SCHOLARSHIP**—to Adrienne M. Carver of Wilmington, Delaware (St. Mark's High School).

**THE DR. AND MRS. FRANK A. MILANI SCHOLARSHIP**—to Kate A. Ellis of Scranton, Pennsylvania (Bishop Hannan High School).

**THE MR. AND MRS. PAUL F. TOOLAN SCHOLARSHIP**—to Taryn L. Fallon of Merchantville, New Jersey (Bishop Eustace Preparatory School).

**THE H. PATRICIA CURRAN SCHOLARSHIP**—to Erin E. Frey of Lebanon, Pennsylvania (Lebanon High School).

**THE EDWARD J. MANLEY SCHOLARSHIP**—to Erin A. Grasek of Delanson, New York (Duanesburgh High School).

**THE JOSEPH D. AUSTIN SCHOLARSHIP**—to Douglas B. Klein of Somers, Connecticut (Somers High School).

**THE MARY C. LIBERATORE SCHOLARSHIP**—to Ann Marie Mulcahy of Valley Cottage, New York (Nyack High School).

**THE MR. AND MRS. FRANCIS J. PEDICONE SCHOLARSHIP** —to Jennifer A. Schumacher of Levittown, Pennsylvania (Conwell-Egan Catholic High School).

**THE MR. AND MRS. JOSEPH T. DOYLE SCHOLARSHIP**—to Daniel C. Wrazien of Windsor, Connecticut (Windsor High School).

## 1997-2001 Presidential Scholarship Recipients

**THE AUSTIN BURKE SCHOLARSHIP**—to James M. Karlinsey of Tunkhannock, Pennsylvania (Tunkhannock Area High School).

**THE REV. ROYDEN B. DAVIS, S.J., SCHOLARSHIP**—to Claire M. Lorenz of Brooklyn, New York (Notre Dame Academy High School).

**THE SAUL KAPLAN SCHOLARSHIP**—to Thomas W. Hoy of Elysburg, Pennsylvania (Southern Columbia Area High School).

**THE BERTRAM N. LINDER SCHOLARSHIP**—to Paul M. Krebs of Coal Township, Pennsylvania (Our Lady of Lourdes Regional High School).

**THE RALPH J. LOMMA SCHOLARSHIP**—to Katie A. Regan of Endwell, New York (Seton Catholic Central High School).

**THE JAMES J. MACKRELL, M.D., SCHOLARSHIP**— to Christopher J. Rosemeyer of Cordova, Tennessee (St. Benedict at Auburndale School).

**THE MR. AND MRS. RICHARD C. MARQUARDT SCHOLARSHIP**— to Susan E. Ingraffea of Ringwood, New Jersey (Lakeland Regional High School).

**THE REV. BERNARD R. McILHENNY, S.J., SCHOLARSHIP**— to Kathryn M. Roberts of Sellersville, Pennsylvania (Lansdale Catholic High School).

**THE ANN MOSKOVITZ SCHOLARSHIP**— to Marykatharine Barbalace of Philadelphia, Pennsylvania (Nazareth Academy).

**THE BRIAN J. MURRAY SCHOLARSHIP**— to Susanna E. Puntel of Wyndmoor, Pennsylvania (Mount Saint Joseph Academy).

**THE REV. EUGENE A. NOLAN, S.J., SCHOLARSHIP**— to Julie A. Grenot of Kenvil, New Jersey (Roxbury High School).

## 1998-2002 Presidential Scholarship Recipients

**THE MR. AND MRS JOSEPH CAPUTO SCHOLARSHIP**— to Jennifer M. Sprance of Whitestone, New York (St. Agnes Academic School).

**THE REV. CHARLES CURRIE, S.J., SCHOLARSHIP**— to Raymond A. Schafer of Upper Darby, Pennsylvania (Devon Preparatory School).

**THE MELINDA C. GHILARDI, ESQ., SCHOLARSHIP**— to William S. Slovinsky of Jermyn, Pennsylvania (Lakeland High School).

**THE MR. AND MRS. ALAN GRAF SCHOLARSHIP**— to Mark P. Fitzgerald of Dickson City, Pennsylvania (Scranton Preparatory School).

**THE MRS. HELEN ROBINSON SCHOLARSHIP**— to Sharon M. Canale of Ridgefield, New Jersey (Academy of the Holy Angels).

**THE MR. AND MRS. STANLEY STETTZ SCHOLARSHIP**— to Heather E. Theis of Warrington, Pennsylvania (Gwynedd Mercy Academy).

**THE GERALD P. TRACY, M.D., SCHOLARSHIP** — to April L. Puscavage of Avoca, Pennsylvania (Scranton Preparatory School).

## 1999-2003 Presidential Scholarship Recipients

**THE BOARD OF TRUSTEES SCHOLARSHIP** — to Brooke Burden of Wilkes-Barre Township, Pennsylvania (GAR Memorial High School).

**THE MRS. ETHEL D. BRENNAN SCHOLARSHIP** — to Jennifer E. Kraljic of Hicksville, New York (Holy Trinity High School).

**THE MR. JOHN S. CHIODO SCHOLARSHIP** — to Joann C. Zielinski of Sugarloaf, Pennsylvania (Bishop Hafey High School).

**THE MR. VINCENT E. CORTESE SCHOLARSHIP** — to Ethan M. Giordano of Ringwood, New Jersey (Don Bosco Preparatory School).

**THE ROBERT J. DONOVAN, M.D., SCHOLARSHIP** — to Stephanie Tessing of Washington Township, Pennsylvania (Washington Township High School).

**THE MRS. JOYCE FASULA SCHOLARSHIP** — to Ryan M. Surace of Mayfield, Pennsylvania (Lakeland High School).

**THE JEROME W. JORDAN, M.D., SCHOLARSHIP** — to Melissa M. Stevans of Trucksville, Pennsylvania (Bishop O'Reilly High School).

**THE MS. IRENE KOCAK SCHOLARSHIP** — to Bridget M. Lee of West Nyack, New York (Albertus Magnus High School).

**THE MR. AND MRS. LEONARD R. KUPLINSKI SCHOLARSHIP** — to Jonathan T. Yazinski of Moosic, Pennsylvania (Scranton Preparatory School).

**THE REV. J.A. PANUSKA, S.J., SCHOLARSHIP** - to Jennifer A. Crockett of Northport, New York (St. Anthony's High School).

**THE MS. SUSAN M. SWAIN SCHOLARSHIP** - to Talia Argondezzi of Norristown, Pennsylvania (Kennedy-Kenrick Catholic High School).

## PURPLE CLUB SCHOLARSHIPS

Noteworthy among gifts to University of Scranton students are the significant amounts contributed annually by the Purple Club of Scranton. Since its founding in 1933, the Purple Club has provided special financial support to deserving and qualified students.

## ENDOWMENT

The University Endowment welcomes gifts of funds or property from alumni, parents of students and other persons interested in the support of higher education.

Generally, the principal of an "endowment" is non-expendable. Income earned by investment of the endowment may be used for scholarships, academic chairs, maintenance of buildings or other purposes specified by donors.

Some endowments are established by bequest through wills. Charitable trusts and insurance programs, in more than a dozen variations, also provide a significant source of endowment funds, with the added feature of a life income for the donor. Outright gifts of highly appreciated securities or other property constitute another source of endowment funds.

Those interested in learning more about the cost and tax advantages of establishing a scholarship or other memorial should contact:

Robert J. Sylvester
Vice President for Institutional Advancement
(570) 941-7661

# ENDOWED SCHOLARSHIPS

**THE EUGENE J. AND ELIZABETH J. AGNONE SCHOLARSHIP**—This scholarship, established in 1997, aids needy students from the Scranton area who are interested in pursuing careers in medicine.

**THE ALPERIN FAMILY SCHOLARSHIP**—Members of the Alperin Family (Irwin E. Alperin, Myer Alperin, Toni Alperin Goldberg, the late Joel M. Alperin and their families) established this scholarship in 1987. It is given to incoming students who have demonstrated excellence in the classroom and financial need. First preference is given to employees of the Alperin family companies and their families, but all worthy students from Lackawanna County and Northeastern Pennsylvania are considered.

**THE JOSEPH JAMES AND MARY AGNES ANDRAKO SCHOLARSHIPS**—These scholarships were established in 1988 according to the provisions in the will of the late Joseph J. Andrako. The scholarships benefit students who have financial need and who are enrolled in a premedical or allied health sciences program.

**THE FRANK A. AND HELEN S. BACIEWICZ SCHOLARSHIP**—This scholarship was created in memory of Frank Baciewicz by his family and widow. The student must embody characteristics of generosity, thoughtfulness, humor, and mental and physical tenacity. First consideration is given to students from the Dickson City or Scranton area.

**THE MICHAEL B. BAGDZINSKI MEMORIAL SCHOLARSHIP**—This scholarship was established by family, classmates and friends of Michael, a member of the Class of 1999 who passed away during his senior year. The scholarship is given to theatre students at the University.

**THE EDWARD F. BARTLEY SCHOLARSHIP**—Joseph Austin,'52, and his wife, Mary, established this scholarship in 1996 to honor Bartley, a UofS professor emeritus. The scholarship is awarded to students from Lackawanna County, with preference given to students from the Mid-Valley area.

**THE REV. JOHN J. BEGLEY, S.J., SCHOLARSHIP**—This scholarship, established by the Scranton Jesuit Community to honor one of its own, provides financial assistance based on academic excellence and demonstrated need.

**THE VELIO E. BERARDIS, M.D., MEMORIAL SCHOLARSHIP**—In 1989 Mrs. Dorothy Berardis established a scholarship to honor the memory of her husband, Velio E. Berardis, M.D. This scholarship provides awards, based on merit and need, to senior premedical students. Special preference is given to those who plan to attend Jefferson Medical College.

**THE MICHAEL J. BEVILACQUA SCHOLARSHIP**—The Bevilacqua family established this scholarship in 1989 as a memorial to honor the late Michael J. Bevilacqua. The scholarship is available to students from New Jersey families who have more than one student in college at the same time.

**THE CHESTER AND VERONICA BOCHINSKI MEMORIAL SCHOLARSHIP**—This scholarship was established by James C. Bochinski, '70, and his sister, Marie A. Ryan, in memory of their parents. The scholarship is given to students from Northeastern Pennsylvania who pursue courses of study in psychology, nursing or business administration.

**THE FRANCIS P. BOLAND, M.D., MEMORIAL SCHOLARSHIP**—Family, friends and colleagues established this scholarship shortly after Dr. Boland's death in 1987. Each year a grant is given to premedical students. The scholarship is based primarily on merit.

**THE PAUL M. AND JOAN A. BORICK SCHOLARSHIP**—Dr. Borick, '47, and his wife established this scholarship for students from Lackawanna County's Mid-Valley area who intend to pursue courses of study in microbiology.

**THE MARGARET BRIGGS FOUNDATION SCHOLARSHIP**—In 1995 the Margaret Briggs Foundation established this scholarship for an incoming freshman who demonstrates financial need. Students from Lackawanna County are given first consideration; thereafter qualified students from one of the surrounding counties are considered.

**THE WILLIAM J. AND ELIZABETH F. BURKAVAGE SCHOLARSHIP**— Established in 1998, this scholarship is awarded to deserving students in Northeastern Pennsylvania, with first preference to those who live in Lackawanna County.

**THE BURKE FAMILY SCHOLARSHIP**—Income from this scholarship benefits needy and deserving students. The Burke family was originally from the Hyde Park section of Scranton. Thomas F. Burke, '09, played a leadership role in establishing the scholarship.

**THE ALIO J. BUSELLI MEMORIAL SCHOLARSHIP**—Mrs. June Buselli established this scholarship in memory of her husband to assist incoming freshmen from Lackawanna County pursuing degrees in chemistry.

**THE REV. HENRY J. BUTLER, S.J., MEMORIAL SCHOLARSHIPS**—The first scholarship was established in 1984 by James Summers in honor of the executive vice president of the University who died in office in 1981. A second Butler Scholarship was established in 1985 by John A. McCrane, a classmate of Father Butler at Georgetown University.

**THE PRIVATE FRANK J. CALI SCHOLARSHIP**—Mr. and Mrs. Samuel C. Cali created this scholarship in memory of Mr. Cali's brother. It is available to any student who meets the University's qualifications.

**THE BRIDGET CARNEY SCHOLARSHIP**—This scholarship was established in 1972 by a bequest of James I. Kearney, M.D. Income from the scholarship, which is named to honor the memory of Dr. Kearney's mother, is awarded to students, one or both of whose parents were or are parishioners of St. Ignatius Parish, Kingston, Pennsylvania.

**THE JAMES J. CLAUSS SCHOLARSHIP**—Established in 1973 by a local businessman and alumnus, '47, this scholarship provides aid to students who require financial assistance but do not qualify for most aid programs based on financial need. First consideration is given to Northeastern Pennsylvania students.

**THE JON A. CLAUSS SCHOLARSHIP**—An endowed scholarship was established in 1980 to honor the memory of Jon A. Clauss, son of Dr. and Mrs. Thomas F. Clauss of Justus, Pennsylvania. Income from the scholarship is distributed to deserving young men and women.

**THE REV. JAMES J. CONLIN, S.J., SCHOLARSHIP**—This scholarship provides financial assistance based on academic excellence as well as demonstrated need.

**THE JAMES A. AND JOAN CONNOLLY SCHOLARSHIP**—Mr. Connolly, '43, and his wife established this scholarship, which provides financial assistance based on academic excellence and demonstrated need.

**THE LOUIS AND ERNESTINE DeSARRO CORTESE MEMORIAL SCHOLARSHIP**—Vincent E. Cortese, '37, established this scholarship in 1998 in memory of his parents. Students must be enrolled in The College of Arts and Sciences.

**THE COTTONE SCHOLARSHIP**—A bequest from Benjamin J. Cottone, M.D., '27, established this scholarship for premedical students.

**THE GRACE COURTNEY SCHOLARSHIP**—Raymond S. Courtney established this scholarship with a bequest in memory of his wife. It provides financial assistance to students who meet the University's admission requirements.

**THE CRUCIANI FAMILY SCHOLARSHIP—**Dominick A. Cruciani, Jr., M.D., '54, his wife, Florence, and their family have established this scholarship for students from Mid-Valley and Valley View high schools who intend to pursue courses of study in health-allied fields.

**THE WILLIAM J. CUSICK PURPLE CLUB SCHOLARSHIP—**Mr. Cusick, '52, established this scholarship, based not on academic merit but on demonstrated financial need.

**THE SALVATORE CUSUMANO FAMILY SCHOLARSHIP**—This scholarship, established through a bequest from Mr. Cusumano, is awarded to students who are enrolled in the premedical program and who have demonstrated financial need.

**THE HAROLD DAVIS, M.D., SCHOLARSHIP**—This scholarship, established in 1994, is presented to a female undergraduate from Northeastern Pennsylvania pursuing a degree in the health sciences. The recipient must be involved in extracurricular activities. Both financial need and scholastic merit are considered.

**THE REV. ROYDEN B. DAVIS, S.J., SCHOLARSHIP**—This scholarship, established by the Scranton Jesuit Community to honor one of its own, provides financial assistance based on academic excellence and demonstrated need.

**THE EUGENE J. DONAHUE SCHOLARSHIP**—This scholarship was established in 1997 in memory of John and Ann Donahue by Eugene Donahue, a resident of Clarks Summit and a 1968 graduate of The University of Scranton. The scholarship is for students who show a demonstrated need, and first consideration is given to students residing in Lackawanna County. Recipients must be enrolled in the University's Dexter Hanley College.

**THE JUDITH A. DOYLE SCHOLARSHIP**—This scholarship was created by Joseph T. Doyle, '69, in honor of his wife and in appreciation of his Jesuit education at The University of Scranton. The scholarship provides financial assistance to deserving and needy students.

**THE DENISE DUBBELS MEMORIAL SCHOLARSHIP**—This scholarship was created by students and faculty members in memory of Denise, an Honors Program student and member of the Special Jesuit Liberal Arts program, who was killed in an automobile accident while studying in Russia. Her degree was conferred posthumously in 1994. The scholarship aids students who want to study in non-Western European countries.

**THE ROBERT I. EDELSOHN SCHOLARSHIP**—In 1964 a sum was bequeathed in the estate of Robert I. Edelsohn, a Polish immigrant who became a Scranton businessman and realtor. Income provides scholarships for needy and deserving students at the University.

**THE EDUCATIONAL FREEDOM SCHOLARSHIP**—In 1990 Joseph E. McCaffrey, '38, established this scholarship to aid students who graduate from Lackawanna County parochial schools. Mr. McCaffrey, a member of the New Jersey Chapter of Citizens for Educational Freedom, passed away in 2000.

**THE ETR AND ASSOCIATES, INC., SCHOLARSHIP**—This scholarship was created by Mr. Robert E. Lee, president of ETR and Associates, in appreciation of the fine Jesuit education his daughter received at The University of Scranton. It is open to any student demonstrating personal financial need.

**THE PETER J. FARRELL AND MAIDA LIPPERT FARRELL SCHOLARSHIP**— Proceeds from this scholarship, established in 1988 by Professor Matthew C. Farrell, Ph.D., are intended for students of Native American ancestry.

**THE JOHN FRANCIS FINETTI MEMORIAL SCHOLARSHIP**—This scholarship was established by the family of a young man from the Hill Neighborhood near the University's campus. It is for students who demonstrate ability in one or more of history, music, forensics and theatre, with preference given to students from Lackawanna County.

**THE LAUREEN FINN MEMORIAL SCHOLARSHIP**—Laureen Finn died in her sophomore year at The University of Scranton. Family, friends and fellow members of the Class of 1990 established this scholarship in her memory. Proceeds assist a freshman education or English major with preference given to residents of Englishtown, New Jersey.

**THE MARTHA AND HERBERT FINN MEMORIAL SCHOLARSHIP**—This scholarship was established by William H. Finn, '67, in honor of Martha and Herbert Finn. The proceeds are to assist students from southern Connecticut and Westchester, Nassau and Suffolk counties in New York.

**THE MARTHA FITCH SCHOLARSHIP**—In 1955 a bequest was made to the University by Miss Martha Fitch, a retired nurse and former superintendent of Thompson Hospital, Scranton. Income is used to provide scholarships for needy and deserving students.

**THE REV. JOHN J. FITZPATRICK, S.J., SCHOLARSHIP**—This scholarship honors the Rev. John J. Fitzpatrick, S.J., who, prior to his death in 1987, served The University of Scranton for 22 years in various roles including dean of men, Jesuit minister, student counselor and University chaplain. The scholarship helps students of academic excellence who have demonstrated financial need. Preference is given to students from Northeastern Pennsylvania who are enrolled in The Dexter Hanley College. The scholarship was established through the generosity of Midori Y. Rynn, Ph.D., professor of Sociology/Criminal Justice.

**THE FLEET PENNSYLVANIA SERVICES SCHOLARSHIP**—Sons and daughters of Fleet Pennsylvania Services employees are eligible for this scholarship. The University's financial aid office selects students based on financial need.

**THE JAMES H. FOY, M.D., MEMORIAL SCHOLARSHIP**—Established in 1987 by Dr. and Mrs. Joseph J. Rupp to honor Dr. Foy, whose encouragement and support helped Dr. Rupp in his education, the scholarship is given to premedical students who also demonstrate proficiency in the humanities.

**THE JAMES M. FRANEY SCHOLARSHIP**—This scholarship, started from a bequest from the estate of Mr. James M. Franey, benefits students from Northeastern Pennsylvania.

**THE SARA G. FRIEL MEMORIAL SCHOLARSHIP**—Before her death in 1982, Sara G. Friel, aunt of then University president, William J. Byron, S.J., directed that part of her estate be used to assist deserving and financially needy students each year.

**THE JOSEPH P. GALLAGHER MEMORIAL SCHOLARSHIP**—The Greater Scranton Chamber of Commerce created this scholarship in 1995 to honor the memory of Mr. Gallagher, who was employed by the Chamber for 15 years. The scholarship is given annually to a senior who is the son or daughter of an employee of any current member of the Chamber.

**THE MORRIS AND MAE GELB SCHOLARSHIP**—Established in 1989, through gifts from the Gelbs and members of their family and friends, this scholarship benefits deserving and needy students of all faiths attending the University.

**THE REVEREND JOSEPH GIRARD GILBRIDE, S.J., MEMORIAL SCHOLARSHIP**—This scholarship is for residents of Peckville (Blakely Borough), Carbondale, Throop, Nanticoke, the Parsons Section of Wilkes-Barre and Plymouth, all in Northeastern Pennsylvania. It was established by Fr. Joseph G. Gilbride, prior to his death, to provide assistance to needy and worthy students.

**THE DR. AND MRS. JOHN GIUNTA SCHOLARSHIP**—Professor Giunta created this scholarship out of his loyalty to The University of Scranton and his appreciation for the fine education his own children received here. The scholarship is given to students pursuing degrees in economics.

**THE PETER S. GRAYBAR MEMORIAL SCHOLARSHIP**—Created to honor Peter S. Graybar, a beloved friend and active member of The University of Scranton's Class of 1993, this scholarship provides assistance to a junior who has demonstrated active involvement in extracurricular activities.

**THE EDWARD T. GRONCKI SCHOLARSHIP**—Established to honor the memory of a University of Scranton alumnus, this scholarship is for deserving young men and women who live in Lackawanna County.

**THE IRVING AND EDYTHE GROSSMAN SCHOLARSHIP**—This scholarship was created out of the generosity of Irving and Edythe Grossman and is a memorial in their honor. Eligible students must demonstrate academic achievement and participation in community service.

**THE JUDGE FREDERICK W. GUNSTER SCHOLARSHIP**—The estate of Joseph F. Gunster, '17, provided funds for this merit scholarship to honor the memory of his father.

**THE MARGARET GUNSTER SCHOLARSHIP**—Joseph F. Gunster's mother is remembered through a scholarship designed to assist students from low-income families.

**THE RUTH GUNSTER MEMORIAL SCHOLARSHIP**—In 1971, Joseph F. Gunster, '17, established this scholarship in loving memory of his wife. The scholarship, which was increased by a bequest in 1980, benefits students from Northeastern Pennsylvania.

**THE JOHN AND LUCILLE GUZEY SCHOLARSHIP**—Begun in 1978, this scholarship assists members of the Scranton Boys and Girls Club, and also students with financial need.

**THE A.J. GUZZI GENERAL CONTRACTORS, INC., SCHOLARSHIP**—Angelo J. Guzzi created this scholarship to assist qualified and deserving students from one of the following high schools: Abington Heights, Valley View, Mid-Valley or Lakeland. The recipient is an incoming freshman who demonstrates financial need.

**THE REV. JOSEPH M. HAMERNICK, S.J., SCHOLARSHIP**—This scholarship, established by the Scranton Jesuit Community to honor one of its own, provides financial assistance based on academic excellence and demonstrated need.

**THE REV. DEXTER HANLEY, S.J., SCHOLARSHIP**—This scholarship, named for the late Dexter Hanley, S.J., Esq., former president of The University of Scranton, assists nieces and nephews of University Jesuit personnel.

**THE SARKIS R. HAZZOURI, JR., MEMORIAL SCHOLARSHIP**—This scholarship was established in 1997 to assist incoming freshmen from Lackawanna County. First preference is given to graduates of West Scranton High School who intend to enroll in The Kania School of Management.

**THE REV. WILLIAM B. HILL, S.J., SCHOLARSHIP**—This scholarship was established by the late Gerardine C. Hill to honor her brother, Rev. William B. Hill, S.J. Since 1969, Fr. Hill has served in several administrative positions at The University of Scranton, including that of special assistant to the president.

**THE HILL NEIGHBORHOOD ASSOCIATION/PETER CHEUNG SCHOLARSHIP**—This scholarship, named in honor of Peter Cheung, who died in an accident while an undergraduate, benefits a junior or a senior who has demonstrated service to the neighborhood and the University community. Preference is given to residents of the city of Scranton's Hill Neighborhood.

**THE HOESCHELE-STEINMETZ SCHOLARSHIP**—This scholarship was established by General Electric in honor of David B. Hoeschele, an alumnus of the Class of 1950. Mr. Hoeschele was chosen by G.E. for a prestigious award for his leadership in the field of electronic circuit design. He requested that funds be used to establish a scholarship for United States citizens or permanent residents from Northeastern Pennsylvania, who are enrolled as full-time undergraduates in either the physics or electrical engineering program. This scholarship is based on need and academic merit.

**THE GEORGE RONALD HOLMES, Ph.D., SCHOLARSHIP**—Dr. Holmes, an alumnus of the Class of 1961, and his wife started this scholarship to provide aid to junior and senior psychology majors.

**THE ROBERT V. HORGER SCHOLARSHIP**—This scholarship, established by Robert V. Horger, a prominent Scranton banker, is given to qualified students from the incoming freshman class who demonstrate financial need.

**THE FRANK AND JEAN HUBBARD SCHOLARSHIP**—This scholarship, established through a generous gift from Frank and Jean Hubbard, is for graduates of North Pocono High School in the top 25% of their class who have demonstrated financial need. It is expected that the recipient will take a minimum of 15 credits each semester.

**THE ITT SCHOLARSHIP**—The International Telephone and Telegraph Corporation established this scholarship to encourage students to pursue academic excellence. The Office of Admissions annually selects an incoming freshman to receive the scholarship, which is renewable on the basis of academic achievement.

**THE JESUIT COMMUNITY SCHOLARSHIP**—Substantial annual gifts from The University of Scranton Jesuit Community have made possible an endowment to provide unrestricted scholarship aid to deserving students. Most scholarships are based on financial need and academic achievement.

**THE JETHRO SCHOLARSHIP**—Established by a University of Scranton faculty member, Dr. Everett R. Brown, this scholarship is awarded to a freshman management, marketing or economics/finance major who demonstrates that he or she has earned a significant amount of total college expenses. It is not dependent upon financial status of parents or guardians, nor high school grades, and is available for four years, as long as the recipient maintains a grade point average of 3.00 or better.

**THE B. CARL JONES MEMORIAL SCHOLARSHIP**—This scholarship was established in 1988 by family, friends and colleagues of the late B. Carl Jones, a University trustee and benefactor. The scholarship provides financial assistance, based on need, to students from Lackawanna County who are enrolled in The Kania School of Management.

**THE FRANCIS J. KEARNEY SCHOLARSHIP**—A 1977 gift from a retired pharmacist, followed by a bequest in 1979, made possible this scholarship to assist deserving students in need of financial aid.

**THE KOCH-CONLEY AMERICAN LEGION SCHOLARSHIPS**—Established in 1985 by agreement with the American Legion, these scholarships are provided on the basis of academic achievement and financial need. First preference is given to children and grandchildren of the members of the Koch-Conley American Legion Post 121. Thereafter, family members of other Pennsylvania American Legion Post members may be considered.

**THE REV. STEPHEN A. KOLLAR MEMORIAL SCHOLARSHIP**—This scholarship was established in 1977 from the will of the late pastor of Holy Family Church, Scranton. Applications must be considered in the following priority: 1. Kinship to Rev. Stephen Kollar; 2. Members of the Holy Family Church for a minimum of three years prior to filing the application. In the event that there are no eligible candidates in these categories, other needy students may be considered.

**THE MARY R. WALSH KRAHE SCHOLARSHIP**—Established in 1987 by Mary R. Walsh Krahe in memory of her brothers, Nicholas E. Walsh and William E. Walsh, and the Walsh family of Old Forge, Pennsylvania, this scholarship provides support to a student from Lackawanna County with preference given to students who attended Old Forge High School.

**THE KUEHNER SCHOLARSHIP**—This scholarship was established by Carl, '62, and Joanne Kuehner of Naples, Florida, in 1985. The scholarship provides financial assistance to needy students from single-parent families in Lackawanna County.

**THE LACKAWANNA MEDICAL GROUP EDUCATIONAL SCHOLARSHIP**—This scholarship provides assistance to students from Lackawanna County who are in financial need and who intend to pursue careers in health-related professions. First preference is given to children of persons affiliated with Lackawanna Medical Group.

**THE REV. JOHN W. LANGE, S.J., SCHOLARSHIP**—This scholarship, established by the Scranton Jesuit Community to honor one of its own, provides financial assistance based on academic excellence and demonstrated need.

**THE JOSEPH F. AND ROBERT G. LAVIS SCHOLARSHIP**—In 1990 a gift was made to the University through the estate of Robert G. Lavis, a Scranton businessman. Income from this gift provides a full four-year scholarship to an incoming freshman. This scholarship also helps junior and senior students who have a reduction in their ability to meet educational expenses.

**THE EDWARD P. LEAHY SCHOLARSHIP** —This scholarship was established in 1989 by Edward R. Leahy, Esq., '68, in honor of his late uncle and provides aid to needy students.

**THE LESLIE FAY SCHOLARSHIP**—This scholarship was established to assist with the cost of education for family members of Leslie Fay employees at the Wilkes-Barre, Pennsylvania, facility.

**THE RALPH J. LOMMA SCHOLARSHIP** —This scholarship, created in honor of Mr. Lomma, an alumnus of the Class of 1949 and a distinguished Scranton businessman, is presented to students with outstanding high school records. A full-tuition scholarship is awarded every four years to one student.

**THE WILLIAM V. LOUGHRAN AND ALBERT E. PETERS SCHOLARSHIP**—Established in 1985 through a gift of Albert E. Peters and Elizabeth Loughran Peters, this scholarship assists seniors who intend to pursue graduate studies in the fields of science and medicine. The scholarship is based on merit and need.

**THE BRUCE LOWENBERG AND JOHN McLEAN KELLY MEMORIAL SCHOLARSHIP**—Established in 1988 by Mrs. Frances McLean Lowenberg, this scholarship benefits qualified and deserving young men and women.

**THE CLARE BOOTHE LUCE SCHOLARSHIP**—A grant from the Clare Boothe Luce Fund provides undergraduate scholarships to enrolled female students majoring in mathematics and the physical and computing sciences.

**THE FRANK J. AND MAE C. MacENTEE MEMORIAL SCHOLARSHIP**—Founded by the MacEntee family in memory of their beloved parents, this scholarship assists deserving students with their education costs.

**THE REV. FRANK J. MacENTEE, S.J., SCHOLARSHIP**—This scholarship, established by the Scranton Jesuit Community to honor one of its own, provides financial assistance based on academic excellence and demonstrated need.

**THE BETH ANNE AND BRIAN S. MACKIE MEMORIAL SCHOLARSHIP**—This scholarship was created in 1991 as a memorial to Beth Anne Mackie by her parents and renamed in 1998 after the death of Beth Anne's brother, Brian. The eligible student must be a psychology major who demonstrates academic excellence.

**THE EDWARD J. AND ALICE MANLEY SCHOLARSHIP**—Mr. Manley, '60 and a former chair of the University's board of trustees, and his wife established this scholarship for students who live in Lackawanna County.

**THE SALLY AND RICHARD MARQUARDT SCHOLARSHIP**—This scholarship was established in 1997 by Mr. and Mrs. Marquardt, residents of Waverly, Pennsylvania. It is given each year to qualified local students.

**THE MARTIN L. MATTEI MEMORIAL SCHOLARSHIP**—Mr. Mattei, '42 and the first superintendent of schools in the Pittston Area School District, passed away in 1999. His family established this scholarship for Pittston Area High School graduates who demonstrate high academic achievement and financial need.

**THE CONGRESSMAN AND MRS. JOSEPH McDADE PROGRAM OF PUBLIC SERVICE**—This scholarship, established in 1990, supports students majoring in political science who are doing internships in Scranton-area government offices with the intention of pursuing careers in public service.

**THE JOSEPH M. McDADE SCHOLARSHIP**—Contributions from two special tributes in 1998 to retiring U.S. Congressman McDade were used to establish this scholarship to provide need-based financial aid for students from Northeastern Pennsylvania.

**THE ROBERT L. McDEVITT, K.S.G., SCHOLARSHIP**—This scholarship, established in 1977, provides assistance to qualified and deserving Dexter Hanley College students. The scholarship was established by Robert L. McDevitt, K.S.G., a Georgetown University classmate and long-time friend of the late Rev. Dexter L. Hanley, S.J., who served as president of the University from 1970 to 1975.

**THE MONSIGNOR ANDREW J. McGOWAN SCHOLARSHIP**—The F.M. Kirby Foundation, Inc., established this scholarship to honor Msgr. McGowan, a former University of Scranton trustee and honorary degree recipient. It is used to assist deserving students who reside in either Lackawanna or Luzerne County.

**THE JOHN J. AND KATHLEEN McLAINE MEMORIAL SCHOLARSHIP**—John J. McLaine, '71, established this scholarship in 1997 to honor his parents. Preference is given to students from Lackawanna County who are enrolled in The Kania School of Management.

**THE JOHN P. McLEAN SCHOLARSHIP**—The scholarship was established in 1985 by former trustee Thomas E. Sheridan, '60, and many other alumni, students, family and friends to honor Professor John P. McLean, a faculty member for over 50 years. It is presented to deserving accounting students.

**THE CHARLES E. MERRILL SCHOLARSHIP**—In 1969, the Charles E. Merrill Trust of New York City made a gift to the University to assist students of the Catholic faith.

**THE ANDREW AND MARGARET CHORBA MEZICK SCHOLARSHIP**—This scholarship, established by James A. and Mary P. Mezick in honor of Dr. Mezick's parents, is given each year to a qualified incoming freshman, with preference given to students with demonstrated need from the Mid-Valley area.

**THE ANGELO H. MONTRONE SCHOLARSHIP**—This scholarship was established by Paul M. Montrone, '62, president of the Henley Group, Inc., to honor his father. It assists a Kania School of Management student who best exemplifies Mr. Montrone's father's lifelong dedication to self-improvement and ethical behavior in business.

**THE DR. LESLIE E. MORGAN SCHOLARSHIP**—This scholarship was established through a bequest from Dr. Morgan to assist persons studying to become members of one of the health-services professions.

**THE I. LEO AND ANN MOSKOVITZ SCHOLARSHIP**—Mr. and Mrs. Moskovitz, community leaders and friends of the University, established this scholarship for students who intend to pursue careers in business or science, with first preference given to those who live in Lackawanna County.

**THE ROBERT W. MUNLEY MEMORIAL SCHOLARSHIP**—This scholarship was established by Robert W. Munley, Esq., and Judge James M. Munley to honor their father, Robert W. Munley. It supports deserving students from Lackawanna County.

**THE MURPHY SCHOLARSHIP**—This scholarship was established in 1957 through a bequest of Miss Margaret Murphy, a retired schoolteacher and lifelong resident of Scranton. Margaret and her sister, Katherine, made the award "in loving memory of our mother, father, and brothers" to assist needy and deserving students.

**THE DR. LOUIS AND MURIEL MURPHY SCHOLARSHIP**—Dr. and Mrs. Murphy, long-time friends of the University, established this scholarship to provide financial assistance to deserving and needy students.

**THE JAMES NASSER FAMILY SCHOLARSHIP**—This scholarship was established in 1986 by Mr. and Mrs. James R. Nasser. Preference is given to needy students from Lackawanna County.

**THE NEPA APICS SCHOLARSHIP**—This scholarship was established in 1987 by Northeastern Pennsylvania Chapter of the American Production and Inventory Control Society for qualified junior or senior students enrolled in the Operations Management major of The Kania School of Management and/or active members of The University of Scranton Chapter of APICS.

**THE NEWCOMBE ENDOWED SCHOLARSHIP**—A series of grants from the Charlotte W. Newcombe Foundation, along with matching funds from the University, have established this scholarship, which provides financial assistance to mature, second-career women students.

**THE NEW YORK METROPOLITAN CHAPTER, THE UNIVERSITY OF SCRANTON ALUMNI SOCIETY SCHOLARSHIP**—This scholarship assists undergraduate students on an annual basis.

**THE MARIAN R. OATES MEMORIAL SCHOLARSHIP**—This scholarship, established in memory of an alumna who died in an automobile accident shortly after her graduation in 1990, benefits middle-income students from New Jersey.

**THE RAYMOND S. O'CONNELL SCHOLARSHIP**—Shortly before his death in 1981, Raymond S. O'Connell, '42, established a scholarship for needy students. After his death, his sister, Sara E. O'Connell, completed the gift.

**THE FRANK O'HARA SCHOLARSHIP**—This scholarship was established in 1988 by friends and family of "Mr. University," Frank O'Hara. Mr. O'Hara served in many capacities over a long career with the University. O'Hara Hall was named for him and this scholarship, established in his memory, provides assistance to deserving and needy students.

**THE MARIAN M. AND PATRICK F. O'HARA SCHOLARSHIP**—Income from an endowment provides unrestricted scholarships to deserving young men and women.

**THE OPPENHEIM FAMILY SCHOLARSHIP**—This scholarship was established by the Oppenheim family, who for many years owned and operated Oppenheim's Department Store and its predecessor, the Scranton Dry Goods Co. Income from the scholarship is used primarily for part-time, non-traditional students who need financial assistance.

**THE REV. G. DONALD PANTLE, S.J., SCHOLARSHIP**—This scholarship, established by the Scranton Jesuit Community to honor one of its own, provides financial assistance based on academic excellence and demonstrated need.

**THE PAUL J. POINSARD, M.D., SCHOLARSHIP**—Mrs. JoAnne Poinsard established this scholarship in memory of her husband, a University alumnus. The scholarship assists deserving students in premedicine.

**THE REV. GEORGE C. POWELL AND MSGR. JOHN K. POWELL MEMORIAL SCHOLARSHIP**—The Powell family established this scholarship to provide financial assistance to deserving and needy students who also demonstrate good character and leadership qualities.

**THE REV. EDWARD R. POWERS, S.J., SCHOLARSHIP**—This scholarship provides financial assistance based on academic excellence as well as demonstrated need.

**THE ERNEST D. PREATE, SR., MEMORIAL SCHOLARSHIP**—The family of Ernest D. Preate, Sr., Esq., established this scholarship in 1982. First consideration is given to needy students who are residents of Lackawanna County.

**THE REV. J.J. QUINN, S.J., SCHOLARSHIP**—This scholarship honors Rev. J.J. Quinn, S.J., professor emeritus of English. It was started by alumni and former students to honor Fr. Quinn's many years of service to The University of Scranton, his students and the community. Based on merit and need, the scholarship is available to students in all academic disciplines.

**THE BETTY REDINGTON SCHOLARSHIP**—This scholarship was established through a bequest from Mrs. Redington, a former trustee and a long-time friend of the University and its students. The scholarship benefits students who are most in need of financial support to pursue their education.

**THE FRANCIS E. AND ELIZABETH BRENNAN REDINGTON SCHOLARSHIP**—This scholarship was established in 1984 according to provisions in the will of the late Francis E. Redington. It provides financial assistance to students on the basis of both ability and need. Some portion of the income each year supports scholarships for students from the Republic of Ireland.

**THE JOHN CHARLES AND KATHRYN S. REDMOND FOUNDATION SCHOLARSHIP**—Mr. Redmond, a prominent businessman and honorary degree recipient, established this scholarship before his death in 1989. The scholarship is given to an outstanding student who is not eligible for any direct financial aid, as specified by state or federal regulations, but who shows financial need because of the student's family situation (e.g., number of children in school needing parental support).

**THE DR. RICHARD A. RENDICH EDUCATIONAL SCHOLARSHIP**—This endowed scholarship was established by the family of Grace Rendich, a University alumna. Income from the fund is used to assist in the education of needy young men aspiring to the priesthood.

**THE ROAD SCHOLARSHIP**—James C. Barrett, '73 and president of Road Scholar Transport, established this scholarship for his employees and their families.

**THE JOHN M. ROBINSON SCHOLARSHIP**—This scholarship was established by John M. Robinson, who attended the University and subsequently established LPS Industries, Inc., in Newark, New Jersey. The scholarship assists promising and deserving students, with Scranton-area residents receiving first consideration.

**THE PATRICK AND MARIE C. ROCHE SCHOLARSHIP**—Out of their affection for the University and respect for the school's mission, Scranton natives Patrick and Marie Roche created this scholarship for eligible Lackawanna County students.

**THE MARY KAY/ROCHON SCHOLARSHIP**—This scholarship was set up by Mr. John Rochon and the Mary Kay Foundation. It is awarded to bright female students in economic need.

**THE REV. JOSEPH A. ROCK, S.J., SCHOLARSHIP**—Created in memory of Fr. Rock, who served the University as professor of history, academic vice president and, in 1970, acting president, this scholarship assists students in the Academic Development Program.

**THE ROBERT RYDER SCHOLARSHIP**—Established in 1988 by John Diskin, '67, and Coopers and Lybrand as a tribute to Mr. Robert Ryder, long-time vice president for finance/treasurer, the scholarship assists local students of the city of Scranton or the borough of Dunmore, Pennsylvania.

**THE CHARLES V. SABATINO, SR., SCHOLARSHIP**—This scholarship was established in 1990 by Frank C. Sabatino, Esq., '76, as a memorial to his father. This scholarship, based on merit, is awarded to a sophomore who is studying history.

**THE JOSEPHINE SARCINELLI MEMORIAL SCHOLARSHIP**—Med Science Laboratory, Scranton, established this scholarship in 1983 to honor the memory of Josephine Sarcinelli, the office manager of the firm for many years. The scholarship is given to an incoming freshman from Lackawanna County who is in financial need and intends to major in medical technology.

**THE SCRANTON TIMES/SUNDAY TIMES/TRIBUNE SCHOLARSHIP**—This scholarship was established by the Lynett-Haggerty families to provide support to current or former newspaper carriers who are attending The University of Scranton. Employees and their family members are also eligible.

**THE CHARLES AND JOSEPHINE SHANDER SCHOLARSHIP**—A trust established this scholarship, which provides financial assistance to students from Lackawanna County's Mid-Valley area who have at least one parent of Polish, Slovak, Russian or Lithuanian descent.

**THE THOMAS J. SHEVLIN, JR., AND DR. JOHN F. SHEVLIN SCHOLARSHIP**—Established in 1989 through a bequest from Thomas J. Shevlin, Jr., of Carbondale, Pennsylvania, this scholarship assists deserving young men and women in premedical studies.

**THE MARY AND DANA SILVON MEMORIAL SCHOLARSHIP**—Joseph T. Doyle, '69, and his wife, Judith, established this scholarship in memory of Mrs. Doyle's sister and niece. The scholarship is available to graduates of Seton Catholic High School in Pittston, Pennsylvania.

**THE SPECIALTY GROUP, INC., SCHOLARSHIP**—The scholarship was established in 1988 for students of Dunmore High School and Bishop O'Hara High School in Dunmore, Pennsylvania.

**THE FRANCIS J. STAHL, CLASS OF 1935, MEMORIAL SCHOLARSHIP**—This scholarship was established through the will of Mary T. Stahl and her husband, Francis J. Stahl, a 1935 graduate of The University of Scranton. The scholarship assists local needy students.

**THE AMELIA SURACI SCHOLARSHIP**—This scholarship was established in 1977 by the late Mr. Frank Suraci, chairman of Parodi Cigar Corporation, to honor his wife, Amelia. After Mr. Suraci's death, contributions from the Suraci and Keating families were added to the endowment. Each year, the scholarship benefits deserving and needy students.

**THE TRL ASSOCIATES SCHOLARSHIP**—This scholarship was established by Stephen P. Hrobuchak, Jr., President of TRL, Inc., to benefit TRL employees and their children.

**THE UNICO SCHOLARSHIP**—The UNICO Foundation of the Scranton Chapter of UNICO National, a philanthropic group, established this scholarship in 1980 to offer financial assistance to deserving students.

**THE UNITED GILSONITE LABORATORIES SCHOLARSHIP**—This scholarship, established in 1999, is available to U-G-L employees and their families.

**THE UNIVERSITY OF SCRANTON ALUMNI SOCIETY SCHOLARSHIP**—This scholarship, established through contributions by the Alumni Society, is available to children and grandchildren of University of Scranton alumni and alumnae.

**THE CHARLES J. VOLPE SCHOLARSHIP AND LECTURE FUND**—Established in 1988 in memory of Charles J. Volpe, a well-respected Scranton businessman and public servant, the scholarship provides assistance for a student entering the senior year who is majoring in political science. The Lecture Fund provides for an annual lecture featuring a well-known public servant.

**THE PAUL L. WALEFF MEMORIAL SCHOLARSHIP**—This scholarship was established by the parents of Paul L. Waleff, who died in 1984 while a student at The University of Scranton. The scholarship is presented to a junior or senior who plans a career of service to persons with disabilities.

**THE THOMAS P. WHITE SCHOLARSHIP**—Mrs. Irene White established this scholarship to honor the memory of her husband, Thomas. It is awarded to an education major who is a "non-traditional" student, such as a transfer student or an individual returning to school after an absence.

**THE WILLIAM ZAHLER SCHOLARSHIP**—In 1986, Mr. and Mrs. William P. Zahler of Mayfield Heights, Ohio, established a scholarship in memory of their son William Zahler, Jr., an associate professor of English at the University. Income from the scholarship is distributed to deserving young men and women.

# ANNUAL SCHOLARSHIPS

**THE AVENTIS PASTEUR SCHOLARSHIP**—Each year, two graduate students who have demonstrated excellence in the field of biology and who are pursuing biochemistry master's degrees are selected for summer internships at Aventis Pasteur's Swiftwater, Pennsylvania, location.

**THE RITA AND BERNARD BAGLEY MEMORIAL SCHOLARSHIP**—Established in 1990 by the children of Mr. and Mrs. Bagley, this scholarship is available to residents of Sullivan County, Pennsylvania, with preference to parishioners of St. Basil's Church in Dushore.

**THE DR. A.J. CAWLEY SCHOLARSHIP**—In memory of Dr. A.J. Cawley of Pittston, Pennsylvania, a scholarship was established by a legacy from his sister, Miss Ellen Cawley. A scholarship is given each year to a student majoring in electrical engineering.

**THE LEN AND DEBORAH GOUGEON ST. ANN'S SCHOLARSHIP**—Established in 1986 through a gift from Drs. Len and Deborah Gougeon, this scholarship, based on need, provides assistance to a graduate of St. Ann's Elementary School or a member of St. Ann's Monastery Parish in Scranton.

**THE JOSEPH P. HARPER SCHOLARSHIP**—A scholarship was established in 1967 to honor the memory of Joseph P. Harper, professor of physics. An annual scholarship is given to a senior Physics major upon the recommendation of the physics department and with the approval of the director of financial aid. The department of Physics presents, with the scholarship, a citation reminding the recipient of the high scholarly ideals, exemplary life and dedicated service of Professor Harper.

**THE KATHRYN AND BERNARD HYLAND MEMORIAL SCHOLARSHIP FOR EXCELLENCE IN BIOLOGY**—A gift from alumnus Bernard V. Hyland, M.D., made in loving memory of his parents, established an endowment in 1980 to perpetuate this annual scholarship. The scholarship is presented to a graduating senior from the Biology department, who, in the opinion of the department's faculty, has achieved distinction based on academic excellence in Biology, personal integrity and concern for others.

**THE ROSE KELLY SCHOLARSHIP**—A University of Scranton alumnus, Joseph Wineburgh, Ph.D., set in place an endowment to link the efforts of elementary and secondary school teachers to the achievements of college students. Each year, an outstanding student is selected by a committee appointed by the academic vice president. The Rose I. Kelly Scholarship winner is asked to name a high school or elementary teacher who most influenced his or her pre-college academic preparation. Both the student and the teacher from pre-college days are honored at a campus ceremony. Dr. Wineburgh established the program to honor an elementary teacher, Rose I. Kelly, who greatly influenced his life.

**THE LACKAWANNA COUNTY LAWYERS' AUXILIARY SCHOLARSHIP**—Established in 1982, this scholarship is annually presented to an outstanding graduating senior from Lackawanna County to provide scholarship assistance in the first year of law school. The scholarship is given directly by the Lawyers' Auxiliary, upon the recommendation of the University pre-law advisor.

**THE CHARLOTTE W. NEWCOMBE FOUNDATION SCHOLARSHIP**—This scholarship provides aid for mature, second-career women students.

**THE O'MALLEY & HARRIS PRE-LAW SCHOLARSHIP**—This scholarship, sponsored by the law firm, O'Malley & Harris, P.C., is based on the outcome of an annual competition among full-time undergraduates at both The University of Scranton and Marywood University. Entry information is available from either school's pre-law advisor.

**THE CHRISTOPHER JASON PERFILIO MEMORIAL SCHOLARSHIP** —Christopher Perfilio passed away the summer before his senior year. His parents and older brother established this scholarship in his honor to assist philosophy and theology/religious studies students who have records of high academic achievement and who demonstrate financial need.

**THE BERNARD SHAIR MEMORIAL SCHOLARSHIP**—This scholarship, established by family, friends and colleagues of Dr. Shair through the Scranton Area Foundation, is presented annually to a graduating senior of The University of Scranton who has been enrolled in an accredited dental school.

**THE ARMOND AND BETTY STRUTIN SCHOLARSHIP**—This scholarship, created out of the generosity and commitment to The University of Scranton by Armond and Betty Strutin, is distributed each year to deserving students identified and designated by the Purple Club.

# BIENNIAL SCHOLARSHIP

**THE DR. JOHN H. CORCORAN SCHOLARSHIP** —Biennially the Society of the Friendly Sons of St. Patrick of Lackawanna County provides funds for a University of Scranton student or students to enjoy the benefits of studying for one or two semesters at a university in Ireland. Contact Dr. Mary Engel, associate dean of The College of Arts and Sciences, for further information.

# ENDOWED CHAIRS

**THE ALPERIN CHAIR IN BUSINESS ADMINISTRATION**—Established by an endowment, this academic chair was set in place in 1980 through the gifts of three Scranton businessmen, Joel, Irwin and Myer Alperin, and their families. The late Joel Mitchell Alperin was the originator and the principal sponsor of the chair and its endowment. Income from the Alperin brothers' gift is applied to the salary of a professor in The Kania School of Management.

**THE CHAIR IN JUDAIC STUDIES**—Income from an endowment established by alumni and friends of the University makes it possible for the University to invite, for short visits to Scranton, Judaic scholars from Israel or other parts of the world, for public lectures and meetings with students and faculty.

**THE JOSEPH T. AND FRANK M. McDONALD CHAIR**—Income from an endowment established by George and Dr. Herbert McDonald is used primarily to support the pre-law program, including support of the pre-law advisor, internship program, and advisory team; income is also used to provide scholarship assistance to deserving students in pre-law majors.

**THE PIUS X TEACHING CHAIR OF THEOLOGY**—Established in 1976 by an anonymous gift and the assignment of a matching grant from the University's Commitment to Excellence capital campaign, this chair is occupied by a priest, or jointly by a set of priests, of the Diocese of Scranton. The chairholders are nominated by the faculty of St. Pius X Seminary and approved by the faculty of the department of Theology and Religious Studies at the University.

# OTHER ENDOWMENTS

**THE NEH ENDOWMENT**—This endowment has been established through a challenge grant from the National Endowment for the Humanities. It supports the acquisition of materials for the humanities collection in the Weinberg Memorial Library.

**THE JESUIT COMMUNITY CONTRIBUTION**—This gift of funds, returned to the University from payments made to Jesuits for their services, has enabled the University to offer many scholarships from its operating budget and has substantially aided the building program.

**THE REV. JOHN J. LONG, S.J., FUND**—Contributions to this fund were made by friends of the Rev. John J. Long, S.J., president of the University, 1953-1963, on the occasion of his Golden Jubilee in the Society of Jesus and later as a memorial after his death in 1971. The fund is invested and the income therefrom is used for projects and programs concerned with the spiritual growth of students.

**THE LOYOLA LECTURE**—The Jesuit Community serving The University of Scranton has endowed a lecture program intended to bring distinguished Jesuit speakers to campus. Named in honor of St. Ignatius Loyola, founder of the Society of Jesus, this fund can also support visits by other scholars capable of assisting the University community to a better appreciation of its Jesuit heritage.

**THE HARRY AND HELEN MACK AWARD FUND**—This award was established through a unitrust by Mrs. Helen Mack and is restricted to The University of Scranton's Judaic Studies Program. It assists students and the community in learning about Jewish heritage and culture.

# Academic Programs

The University's academic programs for undergraduates are offered through three day schools, The College of Arts and Sciences, The Kania School of Management, and The Panuska College of Professional Studies; and through its division for non-traditional students, Dexter Hanley College. The schools share a common General Education program and offer baccalaureate degrees in 50 fields.

# DEGREE PROGRAMS

The University offers the following degree programs for the undergraduate student:

## BACHELOR OF ARTS

Classical Languages
Communication
English
French
German
History
InterdisciplinaryStudies
InternationalLanguage-Business
Philosophy
Spanish
Theatre
Theology and
Religious Studies

## BACHELOR OF SCIENCE

Accounting
Biochemistry
Biology
Biomathematics
Biophysics
Chemistry
Chemistry-Business
Chemistry-Computers
Computer Engineering
Computer InformationSystems
Computer Science
Criminal Justice
Economics
Early-Childhood Education
Electronic Commerce
Elementary Education
Enterprise Management Technology
Environmental Science
Exercise Science
Finance
Electrical Engineering
Electronics-Business
Gerontology
Health Administration
Human Resources Studies
Human Services
International Business
International Studies
Liberal Studies*
Management
Marketing
Mathematics
Medical Technology
Neuroscience
Nursing
Occupational Therapy
Operations Management
Physical Therapy†
Physics
Political Science
Psychology
Secondary Education
Sociology
Special Education

## ASSOCIATE IN ARTS*
## ASSOCIATE IN SCIENCE*

Business
Computer Information Systems
Criminal Justice
Electronics Engineering
Gerontology
Health Administration
Human Services
Political Science
Sociology

*Available through Dexter Hanley College only.

†Students entering the Physical Therapy program will earn a B.S. in Health Services after completing the first four years of a five-year program and a Master of Physical Therapy degree (M.P.T.) after completion of the fifth year.

## MINORS

Minors, which require a minimum of 15 hours, are currently available in the following fields:

Accounting
Art History
Biology
Business
Chemistry
Biochemistry
Coaching
Communication
Computer Information Systems
Computer Science
Criminal Justice
Economics
English
Foreign Language
Gerontology
History
Human Services
Health Administration
International Studies
Leadership
Management of Structures and Systems
Management of People and Teams
Mathematics
Music Literature
Operations Management
Philosophy
Physics
Political Science
Public Administration
Psychology
Sociology
Theatre
Theology
Writing

Consult departmental listings for details.

Courses counted toward a major may not be counted toward the first 15 credits of a minor. However, courses counted toward a cognate or general-education courses may be used to fulfill minor requirements.

# SPECIAL PROGRAMS

## DOUBLE MAJOR PROGRAM

Students at the end of the first semester of freshman year or thereafter may elect to pursue a second field of concentration in addition to their first major. The permission of the appropriate dean and the agreement of the two pertinent departmental chairpersons should be obtained in writing at this time and placed in the student's file. A second major will consist of all major and required cognate courses. ***For students matriculating in fall 1997 and later, completion of a second major will also require completion of any general education courses that are explicitly required as part of the second major***. Except for double majors involving education and a content area, a second major will not be awarded for fewer than 18 credits in the second field which are not counted as part of the first major. The credits in the General Education area need not, of course, be repeated.

## THREE-YEAR BACHELOR'S DEGREE PROGRAM

The University of Scranton's curriculum and academic calendar allow qualified students to attain their bachelor's degrees within three years — thus considerably reducing the overall cost of their undergraduate education and allowing the student to enter the marketplace or begin graduate and professional studies a year earlier. While Advanced Placement or College Level Examination Programs credits (see Index) are very useful for this, a student who does not bring these from high school may still complete the degree program in most majors within three years through the use of January intersession courses and/or summer-school sessions. The presumption is that normal academic progress is being made. Typically, two summer schools (12 credits each) and two or three January intersessions will suffice. Especially qualified students may be allowed overloads from the appropriate dean further to reduce this — as will Advanced Placement credits. The dean should be contacted as early as possible in a student's career in order to facilitate the needed scheduling. Entering freshman students may want to use the summer school immediately following their high school graduation to further this three-year program; the Director of Admissions should be consulted with respect to this. Details on the special Scranton Preparatory/University Seven Year (4-3) High School-College Degree Program are available from the dean of studies at Scranton Preparatory.

## COMBINED BACCALAUREATE/MASTER'S DEGREE PROGRAM

Undergraduate students of the University, with outstanding undergraduate records, may be eligible to be accepted and dually enrolled in a master's degree program prior to graduation. A student who has achieved an overall Grade Point Average of 3.5 after 64 semester hours, 3.4 after 80 semester hours, 3.3 after 96 semester hours, or 3.2 after 112 semester hours (with at least 32 graded hours at the University) may apply for early admission to a master's degree program through the Combined Baccalaureate/Master's Degree Program. Master's degree programs that accept Combined Baccalaureate/Master's Degree students and details of those programs are found in the section on The Graduate School.

## FOREIGN STUDY PROGRAM

The Foreign Study program at The University of Scranton provides an opportunity for students to continue studies they have begun at The University of Scranton at universities around the world. To date, University of Scranton students have studied in 35 different countries and have represented 30 different majors.

The Foreign Study experience typically takes place during the junior year; however, planning should start during the freshman year. In order to participate in foreign study, students need a minimum grade-point average of 3.0 and permission from their departments and deans. Additionally, students are expected to have conducted themselves according to the standards of The University of Scranton, as they are expressed in the student handbook of the University.

Courses taken at foreign universities fill graduation requirements at the University of Scranton. In addition to helping complete their degree programs, students who study overseas for a single term will satisfy one of their cultural-diversity requirements. Students who spend a year studying abroad will satisfy two cultural-diversity requirements. Planning the foreign-study experience in a proper and timely fashion and completing courses taken at a foreign institution successfully should insure that the student graduates with his or her class. Interested students should contact either Michael Simons, foreign study advisor, or Dr. Mary Engel, associate dean of The College of Arts and Sciences and director of foreign study.

## JESUIT EXCHANGE PROGRAM

A variant of foreign study is the University's program in conjunction with the other 27 Jesuit universities in America by which students with a grade-point average of 3.0 or above may spend one or two semesters of their junior year at another Jesuit institution. In recent years, University of Scranton students have attended Boston College, Loyola University in New Orleans, Santa Clara University and the University of San Francisco. Consult Dr. Mary Engel, associate dean of the College of Arts and Sciences, for details of this program.

# ACADEMIC SUPPORT SERVICES

## HARRY AND JEANETTE WEINBERG MEMORIAL LIBRARY

Opened in 1992, this 80,000-square-foot, five-story building is named for Harry and Jeanette Weinberg. Library holdings include 413,492 volumes, 2,033 print periodical subscriptions, over 3,030 full-text electronic journals, and 475,815 microform pieces. The facility includes group-study rooms; quiet study areas; a twenty-four-hour study room with computer lab; and the Heritage Room, a large reading room on the fifth floor overlooking the campus and community. Over 83 databases are available on the World Wide Web. Several include the full text or full image of journal articles. The Heritage Room incorporates a motif reflecting the heritage of Scranton. The University Archives and Special Collections house University historical records, rare books, faculty publications, and other special collections. The Media Resources Collection, located on the first floor, holds 11,852 non-print items, including videocassettes, records, films and filmstrips. The on-line public catalog displays the Library/Media Resources collection holdings and availability of materials. Users may use workstations in the Library to access holdings in the on-line public catalog, via the Internet. The Library subscribes to the World Wide Web on-line databases including UnCover, a current contents/document delivery service. There are 55 Internet workstations in the Library, including 25 machines available 24 hours a day, seven days a week in the Pro Deo Room and four laptops that are available at the circulation desk. In addition to these machines, students may use ResNet ports to plug personal laptops into the network in the first floor Pro Deo Room and group study rooms.

The Library hours are posted on campus, on the Internet, on the on-line public catalog, and on a recording which can be heard at 941-7525. It is open 99.5 hours per week, with extended hours during exam periods. For information about the Library, its services, and resources, see the Weinberg Memorial Library homepage on the World Wide Web (http://www.scranton.edu/wml/wmlhp.html) or select the Library from the University's homepage (www.scranton.edu). Some required readings for courses are available through ERES, an electronic reserve reading database over the Internet. The Library conducts an extensive user-education program to orient and instruct students in research and techniques.

## THE CAS ACADEMIC ADVISING CENTER

The Academic Advising Center, located in 309 St. Thomas Hall, serves all freshmen in The College of Arts and Sciences. Staffed by faculty advisors from a wide variety of disciplines, the Academic Advising Center offers a comprehensive program of academic advising throughout the freshman year. In addition to individual advising, the Academic Advising Center also offers specialized Freshman Seminars for students in the general areas of humanities, natural science, social science and the CAS common curriculum. Faculty advisors are available to students from 8:30-4:30 Monday through Friday; they provide assistance with orientation, pre-registration, drop-add, general-education course selection, declaration and change of major, and assessment of academic performance and goals.

## THE CPS ACADEMIC ADVISING CENTER

The Academic Advising Center, located on the first floor of the McGurrin Hall, serves all students in the Panuska College. Staff are available, during the academic year, Monday through Friday from 8:30 a.m. to 4:30 p.m., to provide individual assistance with academic advising, registration, assessment of academic performance and career goals. The Center also works closely with other campus resources to provide comprehensive advisement opportunities. Faculty mentors are available to students within their academic departments.

## THE KANIA SOM ACADEMIC ADVISING CENTER

The Academic Advising Center, located in Brennan Hall Suite 206, serves all students in The Kania School of Management. Staff advisors are available from 8:30 a.m. to 4:30 p.m., Monday through Friday, to provide assistance with pre-registration, major and general-education course selection, and assessment of academic performance and goals. The Advising Center works closely with other campus resources to provide comprehensive advising services.

## THE LEARNING RESOURCES CENTER

The Learning Resources Center is located on the main floor of Alumni Memorial Hall. It was established to help students accomplish their academic goals at the University. The LRC provides services to supplement those offered in the classroom. The Center is staffed by professional staff and peer tutors. Academic services are available for diagnosed learning-disabled students. A Reading Specialist is also on staff for testing and consultation. Assistance is available on a drop-in or referral basis. Services are provided to students with learning disabilities in compliance with section 504 of the Rehabilitation Act. A writing center is available to students seeking assistance with papers. It is open Monday through Friday from 10:00 a.m. to 7:00 p.m.

## OFFICE OF THE REGISTRAR

As part of the Enrollment Management Division, The Office of the Registrar supports the educational mission of the University by connecting students to the faculty, curriculum and classroom via the course-scheduling and registration process. The registrar also documents and validates the product of this dynamic connection in the form of schedules, rosters, grades, evaluations, transcripts and diplomas.

The Registrar's office serves students on a daily basis by answering questions, issuing transcripts, certifying enrollment status, and distributing forms and schedules. In addition, we advise students of academic policies and procedures, and important dates and deadlines.

The office publishes the master schedule of courses twice each year in October and March, conducts registration, collects and records grades, certifies degree eligibility and manages commencement.

Course registration for returning students is conducted in April for the summer and fall, and in November for spring and intersession via Royal Touch, the University's telephone information system, and UIS, the University Information System on the World Wide Web. Final grades are available via Royal Touch and UIS, while mid-term grades are available to students on UIS.

The Registrar's homepage on the web at http://www.uofs.edu/academic/regmain.html includes: links to the University catalog, academic calendar, final-exam schedule, course schedules and descriptions; a student grade-point-average calculator, registration instructions, forms, commencement information, and the University Information System.

The University Information System (UIS) on the web at https://uis.uofs.edu includes secure links to academic records, registration options, student class schedules, address information, tuition accounts and financial-aid information.

Located in St. Thomas Hall, 301, the Office of the Registrar is open Monday-Friday, 8:30 a.m. to 4:30 p.m. For more information please contact us at (570) 941-7221 or via email at fetterhoffr1@uofs.edu

# ACADEMIC REGULATIONS

## ACADEMIC CODE OF HONESTY

The Academic Code of Honesty addresses behavioral integrity in the academic work of the University. Students have responsibility for governing their own conduct in compliance with the Academic Code of Honesty. Conduct which constitutes a violation of the Academic Code of Honesty includes plagiarism, duplicate submission of the same work, collusion, false information, unauthorized use of computers, theft and destruction of property, and unauthorized possession of tests and other materials. Conduct which violates the Code will ordinarily result in the assignment of the grade "F" by the instructor. The steps which follow may include a discussion with the instructor, an informal meeting with the dean of the college and a hearing before the Academic Dishonesty Hearing Board. For more information about academic dishonesty and the procedures for responding to it, the Academic Code of Honesty should be consulted. It is available in the deans' offices, in the Student Handbook and on the University's web site.

## DEGREE REQUIREMENTS

Students beginning the first term of their degree/certificate program (matriculating) at The University of Scranton in the 2000-2001 academic year are thereafter governed by the curricular policies stated in this catalog. Requirements governing a student's major are those in effect at the time a major is formally declared and approved. First-year students admitted in 2000-2001 will follow the general-education requirements of this catalog.

If a student interrupts his/her education without a leave of absence, the catalog requirements in effect at the time of readmission will apply. Students on an approved leave of absence retain the same requirements they had when they matriculated, if their leaves do not extend beyond a year. In order to earn a bachelor's degree from The University of Scranton the student must complete all the courses prescribed in the curriculum table of the major. No student will be eligible for graduation who has not removed all failures in required courses or who has not earned the minimum 2.00 (C average) grade-point average.

Students must maintain a 2.00 grade-point average in courses required for the major; students who do not meet this standard may be placed by their dean in a "Goal Attainment" semester (for students determined to raise the grade-point average and remain in the major); an "Exploratory" semester (for students wanting to explore possible new majors); or allowed to change to a new major (if the department of the new major approves the requested change). Students must either meet the standard in the original major or change to a new major within two semesters (in the case of Dexter Hanley College, within 30 credits). Students who remain in the "Goal Attainment" and/or "Exploratory" semester program for more than two semesters will be subject to dismissal by their dean.

The University of Scranton provides the opportunity for students who have completed degree requirements to graduate at one of four points throughout the academic year: summer graduation (graduation date: August 31), fall graduation (graduation date: December 31), intersession graduation (graduation date: January 31), or spring graduation (graduation date is the actual date of the commencement exercises, published in the academic calendar at the beginning of each academic year). Commencement exercises are held once in the academic year, following the completion of spring semester. Normally students who are certified for graduation for summer, fall, intersession, or spring graduation may participate in the commencement exercises.

Certification of graduation, receipt of a degree, and permission to participate in the commencement exercises is not automatic. Seniors expecting to complete degree requirements in time for spring graduation must make formal application through the Registrar's Office or Dexter Hanley College by February 15. Students who are expecting to complete

degree requirements for summer, fall or intersession graduation must make formal application a minimum of four weeks prior to the end of the appropriate term.

## GRADING SYSTEM

Grade reports are mailed to all students at the end of each semester and these become part of the official record of the student. Freshmen receive mid-semester grades to inform them of their progress. Upper-class students receive notice at the quarter if they are "deficient" and in danger of failing the course at that time. Grades are also available via Royal Touch or UIS.

| | |
|---|---|
| A, A- | Excellent (outstanding and/or original work) |
| B+, B, B- | Good |
| C+, C | Satisfactory |
| C-, D+, D | Passing but well below average |
| F | Failure (below minimum acceptable standards) |
| W | Withdrew officially; deadline is one month before the last day of classes for the semester. |
| I | Incomplete must be removed by mid-term of following semester. |
| IP | In Progress must be removed by the last day of the following semester. (Normally for honors thesis classes only.) |
| S, P | Satisfactory, Pass—not figured in Grade Point Average |
| U | Unsatisfactory—equivalent to failure |
| Audit | Course not taken for credit. |
| CR | Credit by exam |
| NG | No grade assigned |
| TC | Transfer credit |

AUDIT: Entry of the audit grade (AU) on a transcript assumes satisfactory attendance. The student should consult with the instructor as to what constitutes satisfactory attendance. A change to audit can be made only by passing students and before the end of the first half of a semester.

INCOMPLETE: If a course has not been completed because of illness or other serious reason, an incomplete may be given. To remove this grade the student must satisfy all course requirements by mid-term of the following semester. Any course not completed by this time will result in a grade of F.

REPEAT OF COURSE: Special permission is not needed to repeat courses. Recording of grades for repeated courses shall be governed by the following conditions: 1. Credit for a course will be granted only once; 2. Credit for the course will be lost if the course is repeated and failed; 3. The most recent credit and grade will count toward the grade-point average with this exception: a "W" grade cannot replace another grade; 4. Each attempt to complete a course will be reported on the student's transcript., e.g. a course with a grade of "F" will continue to appear on the transcript even after the course has been repeated with a passing grade. However, the credits from the failed attempt will not be used in the calculation of the cumulative grade-point average.

CHANGE OF GRADE: A student who believes the grade received for a course is unreasonable should first appeal the matter to the professor, whose decision is normally final. The student has the right, however, to appeal to the faculty member's chairperson, who will make a recommendation in writing to his or her dean. The student may request the dean to review the matter. The decision of the dean is final. Ordinarily, no grade change will be considered unless it has been reviewed by the dean's office within one month from the time the original grade was sent to the student.

## FINAL EXAMINATION CONFLICTS

1. When a student has three or more examinations scheduled on the same day, according to the examination schedule issued by the Registrar's Office, it is the student's option whether to take all three examinations on the same day or to have one rescheduled.
2. If the student wishes to have one of the three examinations rescheduled, the examination with the lowest priority, based on the following order of priority, will be rescheduled.

   Major Course – first priority
   Cognate course – second priority
   Elective course – third priority
3. Where a conflict exists between two courses of the same kind (e.g., two cognates or two electives), the more senior professor — in terms of years of service at The University of Scranton — will have first priority.
4. If the student wishes to reschedule a conflict examination, he/she must advise the faculty member prior to the last week of class. If an appropriate resolution cannot be reached between the student and the faculty member, the student should contact his/her dean.

## COURSE NUMBERING SYSTEM

Courses appearing in this bulletin are numbered according to the system described below. The *first* digit of any course number indicates the level of the course; the second and third digits specify categories of courses. Levels at which courses are offered include the following:

| | | | |
|---|---|---|---|
| 100-199 | introductory courses | 400-499 | advanced undergraduate courses |
| 200-299 | lower division courses | 500 and above | graduate courses |
| 300-399 | upper division courses | | |

In cases where no specific prerequisite is listed in the course description, courses at the 300 or 400 level assume Junior or Senior standing and appropriate background in the discipline of the course.

Categories in which courses are offered are indicated according to the following system:

| | | | |
|---|---|---|---|
| ___00–___09 | General-education courses not available for major credit | ___82–___83 | Independent study courses |
| | | ___84 | Special topics |
| | | ___85–___89 | Honors courses |
| ___10–___39 | Courses which may apply either to major or general-education requirements | ___90–___91 | Seminars |
| | | ___92– | Service Learning |
| | | ___93–___94 | Research |
| ___40–___79 | Courses available for major (also minor and required cognate) credit | ___95–___96 | Travel courses |
| | | 498–499 | Thesis |
| ___80–___81 | Practicum, Internship or Co-op courses | | |

Labs are indicated by an **L** following the number of the corresponding lecture courses. Courses in the Special Jesuit Liberal Arts Program are indicated by a **J** following the course number; those in the Honors Program are indicated by an **H** following the course number.

## GRADE-POINT AVERAGE

A standard used in judging a student's performance is the Grade-Point Average, determined as follows:

Each semester hour of credit with a grade of A is valued at 4 quality points; A- at 3.67 quality points; B+ at 3.33; B at 3.0; B- at 2.67; C+ at 2.33; C at 2.0; C- at 1.67; D+ at 1.33;

D at 1.0. An F yields no quality points. Thus, for example, a three-credit course with a grade of A yields 12 quality points; a B yields 9; a C yields 6.

The Grade-Point Average, commonly abbreviated GPA, is computed by dividing the total number of quality points earned by the total of grade-point average credit hours. For example, 15 credit hours, all at C grade, would earn 30 Quality Points or a 2.0 GPA (30/15).

The total number of grade-point average credit hours includes those courses with final grades of F as well as A, B, etc.; CR, I, P, S, W, TC and U credit do not count toward the GPA. This grade-point average applies only to courses taken at The University of Scranton and is not affected by credit transferred from other colleges.

A grade-point average listing is made at the end of each semester. On the basis of his or her cumulative grade-point average, a student's rank in class and eligibility for honors at graduation are determined.

## GRADUATION HONORS

To be eligible for graduation and for honors at commencement, a student must have completed a minimum of 63 credit hours of work at The University of Scranton.

*Summa cum laude*.....3.85 Grade-Point Average in all subjects
*Magna cum laude*.....3.65 Grade-Point Average in all subjects
*Cum laude*.....3.50 Grade-Point Average in all subjects

## DEAN'S LISTS

To be eligible for the Dean's List, College of Arts and Sciences, Kania School of Management, and Panuska College of Professional Studies students must earn 12 or more credit hours which count toward the semester GPA (credit hours of "P" and "S" grades are not counted toward this requirement). Dexter Hanley College students need to complete six or more credit hours which count toward the semester GPA to be eligible for the Dean's List. Of the eligible students, those who earn a 3.50 or higher semester GPA and no grade of D, D+, F, I, NG, or U are named to the Dean's List for that semester. Students placed on the Deans' List will have this distinction indicated on their transcripts. A student's GPA will be recalculated when the last temporary grade (I, IP, NG) is replaced by a final grade. If this new GPA meets the above standard, the student will be placed on the Dean's List.

## PROBATION AND DISMISSAL

One semester of probation is granted to students whose cumulative GPA falls below 2.0, or who otherwise are in danger of dismissal. A second semester of probation is not automatic; a student who does not remove himself or herself from probation after one semester is subject to dismissal, unless excepted by the appropriate dean. Students who receive an F while on probation are also subject to dismissal, as is any student who incurs two F's in one semester, or who has accumulated three F's which have not been successfully retaken. Probationary status may be removed through adequate achievement in summer school or January intersession at The University of Scranton.

Students on academic probation are allowed to take no more than 14 credits (in Dexter Hanley College, no more than 12 credits) during the fall or spring semesters without explicit written approval of the appropriate dean. Students on academic probation are ineligible for participation in extra-curricular activities without the express written approval of the moderator, the student's academic advisor, and the student's dean.

A student placed on academic probation for a second semester may not participate in any extra-curricular activity until such time as he or she is formally removed from academic probation.

It is University policy in the case of a student dismissed from another institution or a college of the University itself that this student will not be allowed to register for courses in any of the colleges of the University in the semester following dismissal.

## ATTENDANCE POLICY

Students are expected to attend all scheduled meetings of courses in which they are enrolled. Every student is responsible for all material presented and announcements made during any class. Attendance policies for individual courses are determined by the instructor and must be promulgated in writing in the course syllabi.

## PASS-FAIL OPTION

Students whose GPA is 2.67 or better may elect to take some courses on a pass-fail basis. Students choosing the pass-fail grading option for a course must file the appropriate form in the Registrar's Office by the end of the second week of the semester (or by the second day of an intersession or summer session course). Specifically required courses, whether in general education or a major, **may not** be taken on a pass-fail basis; courses in a student's major, minor, or cognate **may not** be taken on a pass-fail basis; courses numbered 100-109 may not be taken on a pass-fail basis. Students may not take more than one academic course at a time on a pass-fail basis; no more than one course per year, on average (other than internships, practice, or physical education courses), during their degree programs.

## READER COURSES (INDIVIDUAL STUDY)

The primary purpose of a reader course is to enable a University of Scranton student in good academic standing to pursue a course of study not otherwise offered during the terms in which the reader is taken. Readers may NOT ordinarily be used to fulfill general education requirements. Students may take no more than one reader per term, nor more than one reader per year, on average, during the course of their degree programs. Readers are to be taken for the same number of credits as are granted similar courses in the discipline in which the reader is offered. Readers may not ordinarily be used to repeat failed courses. Exceptions to these policies must be approved by the dean of the student's college and by the dean of the school offering the course.

## UNIVERSITY OF SCRANTON/MARYWOOD UNIVERSITY CROSS REGISTRATION

This program is available to second-, third-, and fourth-year students in good academic standing. Transfer students are eligible after completing their first year at The University of Scranton.

Students may take two such courses (equivalent to six credits) during the calendar year (January - December).

## DROPPING AND ADDING CLASSES

Students may add classes anytime between the initial registration period and the fifth class-day from the start of a semester. The last day to drop a class for a 100% tuition refund is usually the tenth calendar day from the first day of classes for a semester and the second calendar day from the first day of classes for intersession or summer session. (See the University Calendar, inside front cover of this catalog.) The refund schedule applies only to students paying on a per-credit basis or completely withdrawing from the University.

Students who wish to drop one or more classes, but who plan to continue attendance in at least one other class during the term, need to secure their dean's permission to drop classes. Classes may be dropped until the last day for a tuition refund of any amount. The last day to drop courses is usually the thirty-first calendar day of a semester and the fourth calendar day of intersession and summer session. A drop is treated as if the student never registered for the course.

## TRANSFERRING CREDITS FROM OTHER INSTITUTIONS

A matriculating student ***in good academic and disciplinary standing*** at The University of Scranton can transfer in no more than ten (10) percent of the total credits in the student's program. A student transferring in from another institution will be limited to no more than ten (10) percent of the total credits remaining in the student's program. All students must meet the residency requirements which state that 63 credits including the last 30 credits must be taken at The University of Scranton. University of Scranton students who have completed their sophomore year (60 credits) are permitted to take courses only at other four-year regionally accredited institutions. Those who have not completed their sophomore year may be approved for courses at two-year or four-year regionally accredited institutions. Grades below C received elsewhere are not transferable to the University; no grades from other institutions are computed into the student's grade point average. Permission to take courses at another institution is granted by the dean of the student's college. ***Students may not ordinarily take a course at another institution if they have failed the same course at The University of Scranton.*** Students must obtain permission before registering at another institution. Exceptions to this policy can be made by the student's dean.

## WITHDRAWAL FROM A COURSE

A student wishing to withdraw from a course should first discuss the matter with the instructor. Withdrawal always entails financial loss. After the partial-tuition refund period ends, dropped courses will be recorded on a student's academic record with a "W." Students who wish to withdraw from one or more courses, but who plan to continue to attend at least one course for the term, need to secure the teacher's signature of any dropped course and the student's dean's approval.

Those students who wish to drop their last course(s) must complete the Withdrawal/Leave of Absence Form. The completed form must be taken to the Office of the Registrar or to Dexter Hanley College (DHC students). Failure to withdraw from a course(s) may result in a failing grade(s).

The deadline for course withdrawal is indicated on the University academic calendar. This deadline is approximately 30 days before the last class-day for the semester and a proportionate period of time for a short session.

## WITHDRAWAL FROM THE UNIVERSITY

Students wishing to drop or withdraw from their last course(s), thereby discontinuing their enrollment, must secure their dean's permission to withdraw from the University. Students should also discuss any questions with their advisor or department chairperson. The form for withdrawal may be obtained in the Registrar's Office, the Dexter Hanley College office, the Academic Advising Centers, or the academic department chairpersons' offices. University withdrawal is not official until all signatures required on the Withdrawal/Leave of Absence Form have been obtained and the form is delivered to the Registrar's Office or Dexter Hanley College (DHC students).

Any tuition refund will be determined by the official date of University withdrawal. No grades will be recorded on the student's academic record, if the official University withdrawal date is on or before the last day for 25% tuition refund. "W's" will be recorded for course work if the official University withdrawal date coincides with the course withdrawal period. Final grades will be recorded for course work if the official withdrawal date is after the course withdrawal period for the term.

A student who fails to enroll for a semester and has not arranged for a leave of absence, must apply for readmission to the University and, if accepted, will need to satisfy the catalog requirements in effect at the time of readmission.

## LEAVE OF ABSENCE

Students may request their dean's approval for a leave of absence by completing the Withdrawal/Leave of Absence Form. Graduation requirements in effect for the students at the time the leave begins will remain in effect for those students when enrollment is resumed at the end of the leave on the following conditions:

* students on a leave of absence may not take courses at another institution without first securing written approval from their dean;
* the leave is limited to one semester, but may be renewed for one additional semester by the student's dean (documentation may be requested by student's dean);
* ordinarily the students must be in good academic and disciplinary standing at the University when the leave begins;
* students on leave must place their addresses and phone numbers on file in the Registrar's Office and promptly report any address/phone number changes to that office or Dexter Hanley College (DHC students);
* it is understood that this policy does not bind the University to offer the students' curricula or major programs which may have been discontinued or substantially altered during their leave of absence.

## GENERAL REGULATIONS

Ordinarily, all entering students – both freshmen and transfer students – are held to the requirements in the catalog of the year in which they enter.

The University reserves the right to change any of the rules and regulations in this catalog. All such changes are effective at such times as the proper authorities determine and may apply not only to prospective students but also to those who are already matriculated in the University. However, curricular changes shall not become effective until published in the catalog unless specifically approved for an earlier implementation date by the appropriate body. If a change is approved for implementation prior to its publication in a catalog, the appropriate school, department, or program shall inform students affected by the change. Application of policies, rules, and requirements, including changes thereto, may be appealed to the dean of the student's college.

The University reserves the right to take appropriate disciplinary action in the case of any student who conducts himself or herself contrary to the standards of the University. These standards (particularly in the area of academic integrity) are given clear expression in the University's Academic Code of Honesty published in the faculty and student handbooks of the University. The University also reserves the right to modify admissions requirements, the right to change tuition and fees charges, and the right to change the semester schedule of courses.

## STUDENT RIGHTS AND CONFIDENTIALITY OF INFORMATION

The University of Scranton recognizes the privacy rights of individuals who are or who have been students, as guaranteed by the Family Educational Rights and Privacy Act (FERPA) of 1974. No information from records, files, or other data directly related to a student shall be disclosed to individuals or agencies outside the University without the express written consent of the student. FERPA does authorize disclosure without consent to school officials with legitimate educational interests who need to review an education record in order to fulfill their professional responsibilities. The following people or agencies are also allowed access to records without consent: persons or companies with whom the University has contracted (such as attorneys, auditors, or collection agents); students serving on official committees, such as disciplinary or grievance committees, or assisting other school officials in performing their tasks; persons or organizations to whom students have applied for financial aid; persons in compliance with a lawful subpoena or court order; parents of a student who claim the student

as a dependent for income tax purposes; and persons in an emergency in order to protect the health or safety of students or other persons.

The University considers the following to be public information that may be made available, at its discretion, without prior consent of the student:

-Name
-Former Name(s)
-Address (local and permanent)
-Telephone Number (campus/local and permanent)
-Date and Place of Birth
-Photograph
-Major Field of Study
- Participation in Officially Recognized Activities and Sports
-E-mail Address
-Dates of Attendance
-Enrollment Status
-Campus Employment
-Class Schedule
-Class Level
-Expected/Actual Date of Graduation
-Degrees, Awards, Academic Honors
-Weight and Height of Members of Athletic Teams

A student who wishes to prevent the public disclosure of any or all the above information may request so by notifying the Office of Student Affairs, the Dexter Hanley College Office, the Registrar's Office or the Graduate School Office, where he/she may obtain the form prohibiting disclosure. A directory of names, addresses, and telephone numbers of students is published by the University at the beginning of the fall semester. Students who do not wish to be listed in the campus directory must notify the University by the end of the first week of classes in the fall semester.

Except where prescribed by law, information regarding a student's education record may not be disclosed to a parent, guardian or spouse without the student's written authorization on file in the Office of the Registrar, Dexter Hanley Office, or Graduate School Office.

FERPA affords students the right to inspect and review their educational records within 45 days of the day the University receives such requests. Students should submit to the Registrar or other appropriate official written requests that identify the record(s) they wish to inspect. The University official will make arrangements for access and notify the student of the time and place where the records may be inspected.

Students have the right to request the amendment of any educational records that they believe are inaccurate or misleading. They should write to the University official responsible for the record, clearly identify the part of the record that they want changed, and specify why it is inaccurate or misleading. If the University decides not to amend the record as requested by the student, the University will notify the student of the decision and advise the student of his or her right to appeal the decision. Additional information regarding the appeal will be provided to the student when notified.

For more information regarding FERPA, please contact the Office of the Registrar in St. Thomas Hall, 301. Students have the right to file a complaint with the U.S. Department of Education concerning alleged failures by The University of Scranton to comply with the requirements of FERPA. The name and address of the office that administers FERPA is:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202-4605

# THE UNIVERSITY OF SCRANTON GENERAL EDUCATION

All students at The University of Scranton have the opportunity to become liberally educated in the Ignatian tradition. This liberal education will include the development of general skills and skills in the major. It will also include opportunity to develop both depth and breadth in the major, the cognate, and in the areas of natural science, social/behavioral science, humanities, philosophy, and theology. Within the disciplines listed above, students will also take at least two courses that are writing-intensive and two courses with a strong cultural diversity component. The University's approach to general education follows the outline below.

## FIRST YEAR

Development of skills and knowledge in writing, speaking, quantitative reasoning, computing and information retrieval and use.

| | |
|---|---|
| SPEECH | COMM 100[1] |
| WRITING | WRTG 107 or PHIL 217J[1] or WRTG 105 and 106 |
| COMPUTER LITERARCY | C/IL 102 or 104 |
| QUANTITATIVE REASONING | A mathematically based course as recommended by the major or chosen by the student in consultation with an advisor: the titles of courses meeting this requirement are preceded by a (Q) |
| FRESHMAN SEMINAR | Freshman seminar INTD 100 |

[1] Because of its recognition that utilizing information technology, writing, and speaking effectively are skills necessary for success in college and in one's later professional life, The University of Scranton requires that students demonstrate basic competencies in written, oral, and digital communication before their junior year. These competencies may be demonstrated by the students in one of the following ways:

a. An examination supervised by Communication Department faculty (for COMM 100), by English Department faculty (for WRTG 107) and by the Computer Information Literacy Advisory Board (for C/IL 10x and 10xL). These examinations may be taken only once by freshmen and sophomores who have not taken the course in the same skill area.

b. Successful completion (a grade of C or higher) of each course set up to facilitate mastery of these skills: Communication 100 for oral communication; Writing 107 (or appropriate advanced standing course) for writing skills; and each component of Computer/Information Literacy 102 and 102L (or 104/104L) for ability to use digital technology.

## FIRST AND SECOND YEAR

| | |
|---|---|
| PHILOSOPHY | PHIL 120 - PHIL 210 |
| THEOLOGY/REL. STUDY | T/RS 121 - T/RS 122 |
| HUMANITIES | Humanities courses as recommended by the student's home department or student's advisor. Students must earn six credits in one humanities field: history, literature, or foreign language. Students will then earn six more credits in any other humanities fields with no more than three credits in Art or Music. Courses which fulfill the Humanities requirement are listed in several subdivisions under "culture"; the titles of courses meeting this requirement are preceded by a (C). |
| NATURAL SCIENCE | Six credits of natural science as determined either by the major or by the student after consultation with an advisor. Courses focus on the historical and cultural context of science, providing students |

with the tools to analyze and discuss scientific and technological issues and relate quantitative information to scientific theory and models within a particular scientific discipline. Courses which meet the requirements of natural science have an (E) before the title.

SOCIAL/ BEHAVORIAL SCIENCE — Six credits of social/behavioral science as determined either by the student's major or by the student after consultation with an advisor. Courses which fulfill this requirement have an (S) preceding their titles.

PHYSICAL EDUCATION — Physical education courses as chosen by the student. The total number of PHED credits to be completed is three.

## SECOND AND THIRD YEAR

ELECTIVES — Students should begin the 12 credits of free electives that are required. It is recommended that students consider using these credits to develop either a minor or a second major.

PHILOSOPHY or THEOLOGY — Students must take one more course chosen from either Philosophy or Theology/Religious Studies. Courses that meet this requirement have a (P) preceding the title.

Most students will not have had the opportunity to complete all of the GE requirements listed under FIRST AND SECOND YEAR and, therefore, will attend to these requirements in the THIRD and even the FOURTH years. Students are advised to have fulfilled some of their cultural-diversity and writing-intensive course requirements during this time.[2]

## FOURTH YEAR

Finish GE requirements that have not been completed by the end of the THIRD year, including the writing-intensive and cultural-diversity requirements.[2]

| Subject | Credits | Courses |
|---|---|---|
| Freshman Seminar | 1 | INTD 100 |
| Physical Education | 3 | See approved PHED Activity courses |
| Writing | 3 or 6 | *WRTG 107 or (WRTG 105 and 106 for ADP only) |
| Public Speaking | 3 | *COMM 100 |
| Computing Information Literacy | 3 | *C/IL 102 and 102L or 104 and 104L |
| Quantitative Reasoning | 3 to 4 | See approved courses (Q) |
| Theology/Philosophy | 15 | T/RS 121 and 122, PHIL 120 and 210 and Approved T/RS or PHIL Elective (P) |
| Natural Science | 6 to 8 | See approved courses (E) |
| Humanities | 12 Total | Credits must be earned in at least two |
| History | 0-6 | areas with six credits from one |
| Literature | 0-6 | area and a maximum of three credits |
| Foreign Language | 0-6 | from the Art/Music/Theater area. |
| Art/Music/Theater | 0-3 | See approved courses (C) |
| Social/Behavioral Science | 6 | See approved courses (S) |
| Writing Intensive | 3-6 | Two courses (W) |
| Cultural Diversity | 6 | Two courses (D) |
| Electives | 12 | Any subject except PHED activity classes |
| Total Credits | 77-85 based upon major and credit value of courses selected | |

* Requirement may be satisfied by exemption exam.

[2]Note: Writing-intensive and cultural-diversity courses may also satisfy other requirements in the general-education curriculum reducing the total number of credits required. One writing-intensive course should be in the major.

# Curriculum 2000

General Education Requirements and Approved Courses
For Students Admitted Fall 1997 and Later

In the course listings, a course title preceded by a letter code in parenthesis indicates a course that satisfies a general-education requirement in the new curriculum. Some of these courses may also satisfy requirements in areas of the old general-education curriculum. Courses listed here may not be offered during the current registration cycle.

The letter codes are: (Q) Quantitative Reasoning, (C) Humanities/Culture, (E) Natural Science, (S) Social/Behavioral Science, (P) Philosophy or Theology/Religious Studies, (W) Writing-Intensive, (D) Cultural-Diversity. Some courses may have more than one letter code indicating that the course satisfies multiple requirements, e.g. (C,W) satisfies both a Humanities/Culture and a Writing-Intensive requirement.

## SKILLS ACQUISITION

**Public Speaking** – 1 course 3 credits

| | | |
|---|---|---|
| COMM | 100 | Public Speaking |
| PHIL | 217J | The Trivium |

**Writing** – 1 course 3 credits

| | | |
|---|---|---|
| WRTG | 107 | Composition or ENGL 105 and 106, College Writing I and II |

**Quantitative Reasoning** – 1 course 3 credits (Q)

| | | |
|---|---|---|
| EDUC | 120 | Applied Statistics |
| INTD | 224 | Science, Decision Making and Uncertainty |
| MATH | 101 | Mathematics Discovery I |
| MATH | 103 | Pre-Calculus Mathematics |
| MATH | 104 | Mathematics for Elementary Teachers |
| MATH | 106 | Quantitative Methods I |
| MATH | 107 | Quantitative Methods II |
| MATH | 109 | Quantitative Methods in the Behavioral Sciences |
| MATH | 114 | Analysis I |
| MATH | 142 | Discrete Structures |
| MATH | 201 | Algebra and Environmental Issues |
| MATH | 204 | Special Topics of Statistics |
| PS | 240 | Political Science Statistics |
| PSYC | 210 | Psychological Statistics |
| S/CJ | 215 | Statistics for Social Science |
| STAT | 251 | Statistics for Business I |
| STAT | 252 | Statistics for Business II |

**Computing/Information Literacy** – 1 course and lab 3 credits

**C/IL 102/102L** Computing & Information Literacy/Lab
C/IL courses present computing as a tool that amplifies intellectual ability. Students learn to make full use of digital technology in the problem-solving process to obtain, evaluate, and disseminate information. Laboratory exercises introduce students to the use of relevant software tools, and this use is reinforced and broadened through lecture assignments. Furthermore, students gain a conceptual understanding of how computer systems work and an appreciation of the impact of this technology on society. Students completing any C/IL course will be adequately prepared to make use of computing and information resources but are encouraged to take the variant most appropriate for their major since each variant presents its own emphasis and specialized laboratory activities. 2 hours lecture and 2 hours laboratory. Lecture and lab must be taken concurrently. Prior to the mid-semester grade, withdrawal from one requires withdrawal from both. Students must pass both lecture and

laboratory to receive credit for either. Students who earn credit for any C/IL course may not earn credit for another C/IL course, or CMPS 102 or 104.

**C/IL 104/104L** Computing and Information Literacy for Business
This course is a focused variant if C/IL 102/102L with an emphasis appropriate for students with majors in the School of Management.

**Writing-Intensive** – 2 courses (W)
[no additional credits]

| | | |
|---|---|---|
| ARTH | 114 | History of Architecture |
| ARTH | 116 | Art of Greece and Rome |
| ARTH | 117 | Early Christian and Byzantine Art |
| ARTH | 118 | Medieval Art: Romanesque and Gothic |
| ARTH | 216 | Michelangelo and his World |
| ARTH | 217 | Leonardo |
| ARTH | 218 | Art of Baroque and Rococo Europe |
| BIOL | 350L | Cellular Biology Lab |
| BIOL | 370L | Animal Behavior Lab. |
| BLDR | 484 | Eloquentia Negotialis |
| CHEM | 362L | Physical Chemistry Lab. I |
| CHEM | 363L | Physical Chemistry Lab. II |
| CHEM | 450/450L | Biochemistry Lab |
| CHEM | 493-494 | Undergraduate Research |
| CMPS | 490 | Computer Projects |
| COMM | 210 | Logical & Rhetorical Analysis |
| EDUC | 120 | Applied Statistics |
| ENLT | 221 | Woody Allen |
| ENLT | 222 | Graham Greene's Travelers |
| ENLT | 225 | Writing Women |
| ENLT | 227 | Frankenstein's Forebears |
| ENLT | 228 | Race in Anglo-American Culture 1600-1860 |
| ENLT | 234 | Camelot Legend |
| ENLT | 239 | Irish Short Story |
| ENLT | 341 | Shakespere: Special Topics |
| ENLT | 348 | Colonial and Post-Colonial Fiction |
| FREN | 312 | French Composition |
| GERM | 311 | Composition I |
| GERM | 321 | Advanced Stylistics I |
| GERM | 322 | Advanced Stylistics II |
| GRK | 213 | Greek Literature and Mythology in Translation |
| HADM | 293 | Research in Health Administration |
| HIST | 140 | The Historian's Craft |
| HS | 293 | Research Methods in Human Services |
| HUM | 286H | Victorian Studies |
| INTD | 201C | Christian Classics I |
| INTD | 202C | Christian Classics II |
| INTD | 224 | Science, Decision and Uncertainty |
| ITAL | 207 | Italian Women's Writing in Translation |
| ITAL | 208 | Envisioning Italy from Novel to Film |
| LAT | 213 | Classical Roman Literature and Mythology |
| LIT | 205 | Modern Latin American Literature |
| LIT | 207 | Literature of American Minorities |
| MATH | 201 | Algebra and Environmental Issues |
| MATH | 325 | History and Philosophy of Mathematics |
| MGT | 351 | Principles of Management I |
| MGT | 455 | Business Policy |
| NURS | 140 | Introduction to Nursing Concepts |
| NURS | 213 | Child and Adolescent Health |
| NURS | 241 | Perspectives in Professional Nursing |
| NURS | 405 | Health Writing for Publication |
| NURS | 493 | Nursing Research |
| PS | 240 | Political Science Statistics |
| PSYC | 330L | Research Methods Lab |
| PSYC | 335 | Psychological Testing |
| PSYC | 360 | Clinical Psychology |
| PSYC | 491 | History and Literature of Psychology II |
| SOC | 210 | Marriage and The Family |
| S/CJ | 224 | Sociology of Deviance |
| SPAN | 312 | Composition |
| SPAN | 314 | Culture & Civilization of Latin America |
| T/RS | 184C | Inside The Catholic Tradition |
| T/RS | 223 | Heaven and Hell |
| T/RS | 233 | Suffering |
| T/RS | 236 | Prophets and Profits: The Economy in Christian Life |

| | | | | | |
|---|---|---|---|---|---|
| T/RS | 316 | God and the Earth | T/RS | 335 | Judaism in the Time of Jesus |
| T/RS | 326 | The Church and Contemporary Social Issues | T/RS | 337 | Jewish Approaches to Ethics |
| T/RS | 333 | The Jewish Way of Life | T/RS | 449 | Psychology and Spirituality |

Note: Students must take two courses designated as writing-intensive (W). One of the writing-intensive courses should be in the major. Writing-intensive courses may also fulfill other requirements in the general-education curriculum where indicated

## SUBJECT MATTER MASTERY

**The Human Person and God**

*Theology/Religious Studies – 2 courses 6 credits*

| | | |
|---|---|---|
| T/RS | 121 | Theology I |
| T/RS | 122 | Theology II |

*Philosophy —2 courses 6 credits*

| | | |
|---|---|---|
| PHIL | 120 | Intro to Philosophy |
| PHIL | 210 | Ethics |

*Theology/Philosophy Elective — 1 course 3 credits (P)*

INTD 201C Christian Classics I
INTD 202C Christian Classics II
All PHIL courses are approved except for: 120, 210, 219, 231, 232, 314, 321, 327, 331, 340, 425

| | | | | | |
|---|---|---|---|---|---|
| T/RS | 184C | Inside the Catholic Tradition | T/RS | 284 | Special Topics |
| T/RS | 204 | The Epistles of St. Paul | T/RS | 305 | The Apocalypse of St. John |
| T/RS | 207 | Jews, Christians, and the Bible | T/RS | 308 | The Great Prophets |
| T/RS | 215 | Early Christian Writers | T/RS | 309 | The Heart of the Old Testament |
| T/RS | 217 | The Holocaust in Context | T/RS | 310 | Religion and the American People |
| T/RS | 219 | Development of Christian Thought 1100-1800 | T/RS | 313 | Faith and Healing: God and Contemporary Medicine |
| T/RS | 220 | Spirituality: Liturgy and Sacraments | T/RS | 314 | Religions of the World |
| T/RS | 222 | Intro Liturgical Theology | T/RS | 315 | Women in Christianity |
| T/RS | 223 | Heaven and Hell | T/RS | 316 | God and the Earth |
| T/RS | 224 | Theology of the Person | T/RS | 319 | Women's Spiritual/ Autobiographical Writings |
| T/RS | 226 | Introduction to Eastern Liturgies | T/RS | 321 | Friendship and Christian Life |
| T/RS | 227 | Christ in Tradition and Culture | T/RS | 322 | Approaches to God |
| T/RS | 231 | Social Ethics | T/RS | 323 | Signs and Symbols |
| T/RS | 233 | Suffering | T/RS | 326 | The Church and Contemporary Social Issues |
| T/RS | 234 | 20th Century Peacmakers | T/RS | 328 | Wealth and Poverty in Biblical Tradition |
| T/RS | 235 | Theology of Birth and Death | T/RS | 330 | Biomedical Ethics |
| T/RS | 236 | Prophets and Profits: The Economy in Christian Life | T/RS | 331 | Christian Ethics |
| | | | T/RS | 333 | The Jewish Way of Life |
| | | | T/RS | 334 | Jewish and Christian Approaches to Ethics |

| | | | | | |
|---|---|---|---|---|---|
| T/RS | 335 | Judaism in the Time of Jesus | T/RS | 339 | An Exploration of Catholic Identity |
| T/RS | 336 | Contemporary Case Studies in Theology | T/RS | 439 | Psychology and Spirituality |
| T/RS | 337 | Jewish Approaches to Ethics | ED/P | 306 | Philosophy of Education |

**Nature**

*Natural Science – 2 courses 6-8 credits (E)*

| | | | | | |
|---|---|---|---|---|---|
| BIOL | 101 | General Biological Science | NSCI | 286H | Elements of Natural Science |
| BIOL | 105 | Biodiversity | PHYS | 100 | History of Science and Technology |
| BIOL | 108 | History of Life on Earth | PHYS | 101 | The Solar System |
| BIOL | 110 | Structure and Function of the Human Body | PHYS | 102 | Earth Science |
| BIOL | 111 | Structure and Function of the Human Body | PHYS | 103 | Seeing the Light |
| BIOL | 141 | General Biology | PHYS | 104 | Intro to Consumer Technology |
| BIOL | 142 | General Biology | PHYS | 105 | Man and the Evolutionary Universe |
| BIOL | 195 | Tropical Biology | PHYS | 106 | Energy and the Environment |
| BIOL | 201 | Anatomy/Physiology | PHYS | 107 | "Hands on" Physics |
| BIOL | 202 | The ABC's of Genetics | PHYS | 108 | New York Times Physics |
| CHEM | 100 | Elements of Chemistry | PHYS | 109 | The Conscious Universe |
| CHEM | 104 | Science and Society | PHYS | 120 | General Physics I |
| CHEM | 110 | Introductory Chemistry I | PHYS | 121 | General Physics II |
| CHEM | 111 | Introductory Chemistry II | PHYS | 201 | Stellar Evolution |
| CHEM | 112 | General Chemistry I | PHYS | 140 | Elements of Physics I |
| CHEM | 113 | General Chemistry II | PHYS | 141 | Elements of Physics II |
| CHEM | 232 | Organic Chemistry I | PSYC | 105 | Brain and Human Nature |
| CHEM | 233 | Organic Chemistry II | PSYC | 106 | Drugs and Behavior |
| INTD | 211 | HIV/AIDS Issues | PSYC | 231 | Behavioral Neuroscience |
| NSCI | 103 | The Ascent ofMan: History of Science and Technology | | | |
| NSCI | 201 | Science and the Human Environment | | | |

**Culture**

*Humanities – 4 courses (from at least 2 areas) 12 credits (C)*

*History — 2 courses (CH)*

| | | | | | |
|---|---|---|---|---|---|
| HIST | 110 | History of the United States I | HIST | 219 | Modern World History |
| HIST | 111 | History of the United States II | HIST | 221 | The American West |
| HIST | 120 | Europe, 1500 to 1815 | HIST | 224 | Ethnic and Racial Minorities in NE PA |
| HIST | 121 | Europe, 1815 to the Present | HIST | 295 | Britain: Past and Present |
| HIST | 214 | World Politics | HIST | 316 | From Depression to Cold War: 1929-1960 |
| HIST | 216 | Race in American History | HIST | 331 | Recent U.S. History: 1960 to the Present |
| HIST | 217 | History of American Catholicism | | | |

*Literature — 2 courses (CL)*

| | | |
|---|---|---|
| ENLT | 120 | Introduction to Fiction |
| ENLT | 121 | Introduction to Poetry |
| ENLT | 122 | Introduction to Drama |
| ENLT | 125 | Classic American Stories |
| ENLT | 126 | Introduction to Irish Culture |
| ENLT | 127 | Myth of the Hero |
| ENLT | 140 | English Inquiry |
| ENLT | 210 | Modern Poetry |
| ENLT | 211 | Dramatic Comedy |
| ENLT | 212 | American Romanticism |
| ENLT | 213 | Introduction to Satire |
| ENLT | 215 | Literature of the Absurd |
| ENLT | 220 | Shakespeare |
| ENLT | 222 | Graham Greene's Travelers |
| ENLT | 225 | Writing Women |
| ENLT | 226 | Novels by Women |
| ENLT | 227 | Frankenstein's Forebears |
| ENLT | 228 | Race in Anglo-American Culture 1600-1860 |
| ENLT | 229 | The Cross-Cultural Novella |
| ENLT | 230 | Masters of Darkness |
| ENLT | 234 | The Camelot Legend |
| ENLT | 235 | Literature in the Age of Chaucer |
| ENLT | 238 | British Romatic Poets |
| ENLT | 239 | Irish Short Story |
| ENLT | 295 | Shakespeare in Stratford |
| ENLT | 341 | Shakespeare: Special Topics |
| ENLT | 348 | Colonial and Post-Colonial Fiction |
| FREN | 239 | French Christian Thinkers |
| FREN | 313 | Survey of French Literature I |
| FREN | 314 | Survey of French Literature II |
| FREN | 320 | Introduction to French Literature |
| GERM | 313-14 | Survey of German Lit. and Culture |
| GRK | 213 | Greek Literature and Mythology in Translation |
| HUM | 286H | Victorian Studies |
| HUM | 311J | Masterworks I |
| HUM | 312J | Masterworks II |
| ITAL | 207 | Italian Women's Writing in Translation |
| LAT | 213 | Classic Roman Literature and Mythology |
| LIT | 105 | Intro. to World Literature in Translation |
| LIT | 205 | Modern Latin American Literature |
| LIT | 207 | Literature of American Minorities |
| LIT | 208 | French Masterpieces in English Translation |
| LIT | 209 | Masterworks of Russian and Slavic Lit. in English Translation |
| LIT | 384 | Spec. Topics in American Minority Literature |
| SPAN | 203 | Latin American Cultural Heritage |
| SPAN | 296 | Culture, Civilization and Lit. of Latin America |
| SPAN | 320 | Introduction to Literature |
| SPAN | 330 | History of Spanish Literature |
| SPAN | 331 | Survey of Spanish American Literature |
| THTR | 110 | Introduction to Theatre |
| THTR | 211 | Theatre History I |
| THTR | 212 | Theatre History II |

*Foreign Languages — 2 courses (CF)*

| | | |
|---|---|---|
| FREN | 101 | Elementary French I |
| FREN | 102 | Elementary French II |
| FREN | 211 | Intermediate French I |
| FREN | 212 | Intermediate French II |
| FREN | 311 | Advanced French Conversation and Composition I |
| FREN | 312 | Advanced French Conversation and Composition II |
| GERM | 101 | Elementary German I |
| GERM | 102 | Elementary German II |
| GERM | 211 | Intermediate German I |
| GERM | 212 | Intermediate German II |
| GERM | 311 | Advanced German Conversation and Composition I |
| GERM | 312 | Advanced German Conversation and Composition II |
| GRK | 101 | Introduction to New Testament Greek I |
| GRK | 102 | Introduction to New Testament Greek II |

| | | |
|---|---|---|
| GRK | 111 | Elementary Greek I |
| GRK | 112 | Elementary Greek II |
| HEBR | 101-02 | Introduction to Biblical Hebrew |
| ITAL | 101 | Elementary Italian I |
| ITAL | 102 | Elementary Italian II |
| ITAL | 211 | Intermediate Italian I |
| ITAL | 212 | Intermediate Italian II |
| ITAL | 311 | Advanced Italian Conversation and Composition I |
| ITAL | 312 | Advanced Italian Conversation and Composition II |
| JAP | 101 | Elementary Japanese I |
| JAP | 102 | Elementary Japanese II |
| LAT | 111 | Elementary Latin I |
| LAT | 112 | Elementary Latin II |
| LAT | 211 | Intermediate Latin I |
| LAT | 212 | Intermediate Latin II |
| PORT | 110 | Intensive Elementary Portuguese |
| PORT | 210 | Intensive Intermediate Portuguese |
| RUSS | 101 | Elementary Russian I |
| RUSS | 102 | Elementary Russian II |
| SPAN | 101 | Elementary Spanish I |
| SPAN | 102 | Elementary Spanish II |
| SPAN | 211 | Intermediate Spanish I |
| SPAN | 212 | Intermediate Spanish II |
| SPAN | 295 | Contemp. Mexican Culture and Language |
| SPAN | 311 | Advanced Spanish Conversation and Composition I |
| SPAN | 312 | Advanced Spanish Conversation and Composition II |

*Art History/Music History/Theater — 1 course maximum (CA)*

| | | |
|---|---|---|
| ARMU | 140 | Perceiving the Arts I |
| ARMU | 141 | Perceiving the Arts II |
| ARTH | 113 | Topics in Non-Western Art |
| ARTH | 111 | History of Art I |
| ARTH | 112 | History of Art II |
| ARTH | 114 | History of Architecture |
| ARTH | 116 | Art of Greece and Rome |
| ARTH | 213 | American Art |
| ARTH | 214 | Renaissance Art and Architecture |
| ARTH | 210 | Topics on Women in the Visual Arts |
| ARTH | 216 | Michelangelo and His World |
| ARTH | 295 | Michelangelo: Artist and Author |
| ITAL | 295 | Michelangelo: Artist and Author |
| MUS | 111 | Music History I |
| MUS | 112 | Music History II |
| THTR | 111 | Introduction to Acting |
| THTR | 120 | Theatre for Youth and Creative Drama |
| THTR | 213 | Design for the Theater |

## INTEGRATION OF INDIVIDUAL AND COMMUNITY

**Personal**

*Freshman Experience — 1 course 1 credit*

| | | |
|---|---|---|
| INTD | 100 | Freshman Seminar |

*Physical Education — 3 or more courses 3 credits*

| | | |
|---|---|---|
| PHED | 101 | Weight Training |
| PHED | 103 | Tennis |
| PHED | 104 | Self Defense for Women |
| PHED | 105 | Cardio Fitness |
| PHED | 106 | Aerobic Fitness |
| PHED | 107 | Basketball |
| PHED | 108 | Bowling |
| PHED | 109 | Yoga |
| PHED | 110 | Intermediate Swimming |
| PHED | 111 | Scuba Diving |
| PHED | 112 | CPR and First Aid for the Professional |
| PHED | 114 | Racquetball |
| PHED | 117 | Volleyball |
| PHED | 118 | Karate |
| PHED | 119 | Modern Jazz Dance |
| PHED | 120 | Running |
| PHED | 121 | Lifeguard Training |
| PHED | 122 | Water Safety Instructor |
| PHED | 126 | Skiing |
| PHED | 130 | Varsity Sports |

| | | |
|---|---|---|
| PHED | 134 | Kodokan Judo |
| PHED | 136 | Wellness for the Young Adult |
| PHED | 138 | Physical Fitness Training |
| PHED | 139 | Tai Chi Chuan |
| PHED | 141 | Soccer |
| PHED | 142 | Wrestling |
| PHED | 145 | Fitness Swimming |
| PHED | 146 | Golf |
| PHED | 147 | Badminton |
| PHED | 160 | Intro. to Coaching |
| PHED | xxx | Wreslting |

**Social**

*Cultural Diversity — 2 courses no additional credits (D)*

| | | |
|---|---|---|
| ARTH | 113 | Topics in Non-Western Art |
| ARTH | 184 | Oral History of Scranton |
| ARTH | 210 | Topics on Women in the Visual Arts |
| BLDR | 484 | Eloquentia Negotialis |
| COMM | 228 | Intercultural Communication |
| COMM | 229 | Gender and Communication |
| ECO | 351 | Environment of International Business |
| ECS | 110 | Biography as Culture |
| EDUC | 131 | Experiencing Cultural Diversity through Children's Lit. |
| EDUC | 140 | Early Childhood Education |
| EDUC | 346 | Social Studies Methods |
| EDUC | 364 | Inclusionary Classroom Practices |
| ENLT | 126 | Introduction to Irish Culture |
| ENLT | 222 | Graham Greene's Travelers |
| ENLT | 225 | Writing Women |
| ENLT | 226 | Novels by Women |
| ENLT | 227 | Frankenstein's Forebears |
| ENLT | 228 | Race in Anglo-American Culture, 1600-1860 |
| ENLT | 229 | The Cross-Cultural Novella |
| ENLT | 239 | The Irish Short Story |
| ENLT | 348 | Colonial and Post-Colonial Fiction |
| ENLT | 360 | Introduction to Jewish Literature |
| FREN | 212 | Intermediate French II |
| FREN | 239 | French Christian Thinkers |
| FREN | 311 | French Conversation |
| FREN | 313 | Survey French Literature |
| FREN | 314 | Survey French Literature |
| GEOG | 217 | Cultural Geography |
| GERM | 212 | Intermediate German II |
| GERM | 295 | German Culture and Heritage |
| GERM | 313-14 | Survey of German Lit and Culture (can count for only 3 credits) |
| GRK | 205 | Legacy of Greece and Rome |
| GRK | 213 | Greek Literature and Mythology |
| GRK | 295 | Classic and Contemporary Greek Culture |
| HADM | 315 | Cultural Diversity and Health Administration |
| HIST | 212 | Rebels, Rogues, and Reformers |
| HIST | 214 | World Politics |
| HIST | 216 | Race in American History |
| HIST | 219 | Modern World History |
| HIST | 221 | The American West |
| HIST | 224 | Ethnic and Racial Minorities in NE PA |
| HIST | 238 | History of American Women I |
| HIST | 239 | History of American Women II |
| HIST | 240 | History of Modern Italy |
| HS | 241 | Case Management and Interviewing |
| HS | 333 | Multiculturalism in Human Services |
| HUM | 295 | Holy Land Cultural Tour |
| HUM | 311J | Masterworks I |
| HUM | 312J | Masterworks II |
| INTD | 209 | The Holocaust |
| INTD | 211 | HIV/AIDS |
| ITAL | 207 | Italian Women's Writing in Translation |
| ITAL | 208 | Envisioning Italy from Novel to Film: The Case of Neorealism |
| ITAL | 212 | Intermediate Italian II |

| | | |
|---|---|---|
| ITAL | 311 | Conversation/ Composition |
| LAT | 213 | Latin Literature and Mythology |
| LIT | 105 | Intro. to World Literature in Translation |
| LIT | 205 | Modern Latin American Literature |
| LIT | 207 | Literature of American Minorities |
| LIT | 208 | French Masterpieces in English Translation |
| LIT | 209 | Masterworks of Russian and Slavic Literature |
| LIT | 384 | Spec. Topics in American Minority Literature |
| MGT | 474 | Managing a Multicultural Workforce |
| MGT | 475 | International Marketing |
| NURS | 111 | Women's Health |
| NURS | 310 | Nursing the Older Adult |
| NURS | 312 | Nuring the Older Adult |
| NURS | 480 | Nursing the Individual/Family/ Community |
| NURS | 481 | Community Nursing |
| OT | 461 | Geriatrics |
| PHIL | 218 | Feminism: Theory and Practice |
| PHIL | 226 | Chinese Philosophy |
| PHIL | 326 | Advanced Topics in Feminist Philosophy |
| PHIL | 340 | Philosophy and Judaism |
| PHIL | 414 | The Philosophy of Emmauel Levinas |
| PORT | 210 | Intermediate Portuguese |
| PS | 216 | Women's Rights and Status |
| PS | 227 | Women, Authority and Power |
| PS | 321 | Chinese Political Thought |
| PSYCH | 237 | Psychology of Women |
| REES | 140 | Russian and East European Culture |
| REES | 231 | Russian and East European Music |
| SOC | 210 | Marriage and the Family |
| SOC | 224 | American Minority Groups |
| SOC | 232 | Great American Cities |
| SOC | 234 | Cultural Anthropology |
| SPAN | 203 | Latin American Cultural Heritage |
| SPAN | 212 | Intermediate Spanish II |
| PS295 | | Contemp. Mexican Culture and Language |
| SPAN | 296 | Culture, Civilization and Lit. of Latin America |
| SPAN | 311 | Conversation |
| SPAN | 314 | Culture and Civilization of Latin America |
| SPAN | 331 | Survey of Spanish American Literature |
| THTR | 372 | Contemporary Women Playwrights |
| T/RS | 207 | Jews, Christian and the Bible |
| T/RS | 217 | The Holocaust in Context: History and Theology |
| T/RS | 234 | 20th Century Peacemakers |
| T/RS | 314 | Religions of the World |
| T/RS | 315 | Women in Christianity |
| T/RS | 319 | Women's Spritual and Autobiographical Writings |
| T/RS | 326 | The Church and Contemporary Social Issues |
| T/RS | 333 | The Jewish Way of Life |
| T/RS | 335 | Judaism in the Time of Jesus |
| T/RS | 337 | Ethics: The Jewish Tradition |
| T/RS | 439 | Spirituality and Psychology |
| WRTG | 106 | College Writing II |

Note: Students must take two courses designated as Cultural Diversity (D). Cultural Diversity courses may also fulfill other general education requirements in the general education curriculum where indicated.

*Social Behavioral Science — 2 courses 6 credits (S)*

| | | | | | |
|---|---|---|---|---|---|
| S/CJ | 218 | The American Court System | SOC | 224 | American Minority Groups |
| S/CJ | 224 | Sociology of Deviance | SOC | 234 | Cultural Anthropology |
| SOC | 110 | Intro. to Sociology | PS | 295 | Contemp. Mexican Culture and Lang. |
| SOC | 112 | Social Problems | | | |
| CJ | 110 | Criminal Justice | PS | 131 | Intro. to National Government II |
| ECO | 101 | Current Economic Issues | PS | 135 | State and Local Government |
| ECO | 102 | Economic Processes and Perspectives | PS | 230 | Environmental Policy |
| ECO | 153 | Prin. of Microeconomics | PSYC | 110 | Fundamentals of Psychology |
| ECO | 154 | Prin. of Macroeconomics | PSYC | 220 | Social Psychology |
| ECO | 200 | Economic Sec. and Personal Finance | PSYC | 221 | Childhood and Adolescence |
| GEOG | 134 | World Regional Geography | PSYC | 222 | Adulthood and Aging |
| GERO | 110 | Intro. to Gerontology | PSYC | 224 | Personality |
| HS | 111 | Intro. to Human Adjustment | PSYC | 225 | Abnormal Psychology |
| H/GEOG | 217 | Cultural Geography | PSYC | 234 | Cognitive Psychology |
| PS | 130 | Intro. to National Government I | PSYC | 237 | Psychology of Women |
| | | | S/CJ | 210 | Law and Society |
| | | | S/CJ | 213 | Criminology |
| | | | S/CJ | 214 | Juvenile Delinquency |

*Electives — 4 courses 12 credits*

Note: Students are encouraged to use their general-education electives to add minors or second majors where possible. For some majors, specific courses have been recommended in the GE elective area by the home departments. Where no specific recommendations have been made by the home department, any course (other than PHED activity courses) may be used as a free elective.

Please refer to the department course listings in the catalog for complete course descriptions. If you have a question about how a specific course satisfies a requirement, please contact your advisor, advising center, dean's office or registrar's office.

# FRESHMAN OPTION: GENERAL AREA STUDIES

Students not yet ready to declare a major have the option of selecting one of four general areas of study (Humanities, Natural Science, Social Science, Business), with the particular major to be determined in consultation with the appropriate dean's office by the end of freshman year. Curriculum outlines for the general areas are indicated below.

*General Area: Humanities*[1]

| | | *FIRST YEAR* | FALL | SPRING |
|---|---|---|---|---|
| MAJOR/COGNATE | Two sequences from | | 6 | 6 |
| (GE HUM) | HIST 110-111 | History of the U.S. | | |
| | HIST 120-121 | Europe 1500 to Present | | |
| | ENGL 140-164 | English Inquiry-British Lit. | | |
| | THTR 110-111 | Intro. Theatre-Intro. Acting | | |
| | LANG 211-212 or 311-312 | Intermediate/ Advanced Language | | |
| | COMM 110-120 | Interpersonal-Mass Comm. | | |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE C/IL | C/IL 102 | Computer Info. Literacy | 3 | |
| GE PHIL | PHIL 120 | Intro. to Philosophy | 3 | |
| GE T/RS | T/RS 121 | Theology I | | 3 |
| GE QUAN | QUAN ELECT | Quantitative Reasoning Elective | | 3 |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| **TOTALS** | | | **16** | **16** |

*General Area: Natural Science*[1]

| | | *FIRST YEAR* | FALL | SPRING |
|---|---|---|---|---|
| MAJOR/COGNATE | Two or three sequences from | | 7½-13 | 8½-13 |
| (GE NSCI/QUAN) | BIOL 141-142 | General Biology | | |
| | CHEM 112-113 | General Analytical Chem | | |
| | CMPS 134-144 | Computer Science I-II | | |
| | PHYS 140-141 | Elements of Physics | | |
| | MATH 103-114 (or 114-221) | Pre-Calc. Analysis | | |
| | MATH 142-114[2] | Discrete Structures, Analysis | | |
| GE WRTG-SPCH | WRTG 107 - COMM 100 | Composition/Public Speaking | 3 | 3 |
| GE C/IL | C/IL 102 | Computer Info. Literacy | 3 | |
| GE T/RS | T/RS 121 | Theology I | | 3 |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| **TOTALS** | | | **14½-17** | **15½-17** |

[1] Students in General Areas of Humanities, Natural Science, Social Science, and CAS Core Curriculum will select courses in consultation with Dr. Mary Engel, associate dean of CAS, and the faculty advisors in the CAS Academic Advising Center.

[2] Natural Science students who select only two MAJOR/ COGNATE sequences will take two General Education courses in place of a third sequence. Students who select Phys. 140-141 must also take Math 114-221. Students who select CMPS 134-44 must also take Math 142-114.

*General Area: Social Science*[1]

| | | *FIRST YEAR* | FALL | SPRING |
|---|---|---|---|---|
| MAJOR/COGNATE (GE S/BH) | Two sequences from | | 6 | 6 |
| | PSYC 110-ELECT | Fundamentals of Psychology | | |
| | SOC 110-112 | Intro. Soc.-Social Problems | | |
| | SOC 110-GERO 110 | Intro. Soc.-Intro. Gerontology | | |
| | PS 130-131 | American National Gov't. | | |
| | HS 111-112 | Intro. to Human Adj.-Human Serv. | | |
| | SOC 110-CJ 110 | Intro. Soc.-Intro. Crim. Justice | | |
| | EDUC 222-121 | Educ Psych-Found.-of Educ. | | |
| GE WRTG-SPCH | ENGL 107 - COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE C/IL | C/IL 102 | Computer Info. Literacy | 3 | |
| GE PHIL | PHIL 120 - PHIL 210 | Intro. to Philosophy-Ethics | 3 | 3 |
| GE T/RS | T/RS 121 | Theology I | | 3 |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| **TOTALS** | | | **16** | **16** |

*General Area: CAS Common Curriculum**

FALL SEMESTER

| | | |
|---|---|---|
| GE-WRTG 107 | Composition | 3 credits |
| GE QUANT | Quantitative Studies Elective | 3-4 credits |
| GE NSCI | Natural Science Elective | 3-4½ credits |
| GE HUM | Humanities Elective | 3 credits |
| GE S/BH | Social/Behavioral Elective | 3 credits |
| INTD 100 | Freshman Seminar | 1 credit |
| **TOTALS** | | **16-18½ credits** |

SPRING SEMESTER

| | | |
|---|---|---|
| COMM 100 | Public Speaking | 3 credits |
| C/IL 102 | Computer Literacy | 3 credits |
| GE NSCI | Natural Science Elective | 3-4½ credits |
| GE HUM | Humanities Elective | 3 credits |
| GE S/BH | Social/Behavioral Elective | 3 credits |
| PHED | Physical Education Elective | 1 credit |
| **TOTALS** | | **16-17½ credits** |

*A GE sequence may be replaced with PHIL 120 and T/RS 121 according to student interest

*General Area: Business*

| | | *FIRST YEAR* | FALL | SPRING |
|---|---|---|---|---|
| MAJOR (GE S/BH) | ECO 153-154 | Prin. of Micro-Macro Econ. | 3 | 3 |
| GE WRTG-SPCH | WRTG 107 - COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE C/IL | C/IL 104 | Computer Info. Literacy | | 3 |
| GE PHIL | PHIL 120 | Intro. to Philosophy | 3 | |
| GE T/RS | T/RS 121 | Theology I | | 3 |
| GE QUAN-ELECT | MATH | Mathematics Option-2 courses | 3 | 3 |
| GE HUM | HUMN ELECT | Humanities Elective | 3 | |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| **TOTALS** | | | **16** | **16** |

For students considering Health Care or Education as a major, the College of Professional Studies has a program designed to provide an exploratory freshman year for those who wish to defer declaring their choice of major. A recommended curriculum for the area studies program is outlined below.

***General Area: CPS Common Curriculum***

*First Year*

FALL SEMESTER

| | | |
|---|---|---|
| GE WRTG 107 | Composition | 3 credits |
| GE PHIL 120 | Introduction to Philosophy | 3 credits |
| GE BIOL 110 | Structure and Function | 4 credits |
| GE PSYCH 110 | Fundamentals of Psychology | 3 credits |
| INTD 100 (V) | Freshman Seminar | 1 credit |
| **TOTALS** | | **17 credits** |

SPRING SEMESTER

| | | |
|---|---|---|
| GE C/IL 102 | Computer Literacy | 3 credits |
| GE T/RS 121 | Theology I | 3 credits |
| Humanities | Elective | 3 credits |
| HS 132 | Identity Development and Career Choice | 2 credits |
| GE BIOL 111 | Structure and Function | 4 credits |
| **TOTALS** | | **18 credits** |

Students who have no interest in a medical or health science related major will substitute BIOL in consultation with the CPS Advising Center.

# The College of Arts and Sciences

The College of Arts and Sciences (CAS) is the largest academic division of the University with more than 30 areas of studies. Its liberal arts programs serve students well in many different careers. CAS programs also lay the foundation for professional study in law, medicine, and dentistry, as well as for graduate study in various fields.

# ART AND MUSIC

*DR. MICHAEL DeMICHELE, Chairperson*
*DR. JOSEPHINE M. DUNN, Director, Art and Music Program*

The Art and Music program offers two minors: Art History and Music History. Each discipline aims to develop a student's creative expression, to prompt aesthetic appreciation and judgment, to develop critical thinking, and to deepen understanding of the impulse to create with sound and with image.

Courses in Art History and Music History satisfy General Education requirements in the following areas: Humanities, Cultural Diversity, and Writing-Intensive. See designations below.

Courses available for credit in GE Humanities include:
ARTH 111, 112, 116, 210, 213, 214; ARMU 140, 141; MUS 111, 112.

Courses available for credit in GE Cultural Diversity include:
ARTH 113, 210, MUS 113.

Courses available for credit in GE Writing Intensive include:
ARTH 116, 117, 118, 216, 217, 218.

## MINORS IN ART HISTORY AND MUSIC HISTORY

### MINOR IN ART HISTORY

A minor in Art History requires 18 credits, including ARTH 111 and 112. Four additional courses in art history are required. Internships at the Everhart Museum are available to Art and Art History minors upon completing 12 credits in Art/Art History.

Students minoring in Art History have pursued graduate degrees in Art History (Ph.D.), Decorative Arts (M.F.A.), and Museum Education (M.A.). Recent graduates are employed by the Metropolitan Museum of Art (NYC), the Franklin Institute (Philadelphia), and Sotheby's (NYC).

### MINOR IN MUSIC HISTORY

A minor in Music History requires 18 credits, including MUS 111, 112, 235, 236, and two additional music courses numbered 110 or above.

### ART

**ART 112** Staff
**Color and Design** 3 credits
A foundation course introducing the elements and principles of two-dimensional design. Various materials are used to explore the organization of space and basic color theory.

**ART 114** Prof. Colley
**Three-Dimensional Design** 3 credits
A foundation course investigating basic materials and approaches in the creation of three-dimensional form. Hands-on involvement with diverse media, techniques and tools of the sculptor's craft is emphasized.

GE course codes: (C)=Humanities, (D)=Cultural Diversity, (E)=Natural Science, (P)=Philosophy/Theology Electives, (S)=Social Behavioral Science, (W)=Writing Intensive, (Q)=Quantitative Reasoning

**ART 116** Profs. Colley, Podhurst
**Basic Drawing** 3 credits
A foundation course designed to develop skills in basic drawing and perception. Various media are employed in exercises involving the use of line and shading, shape and space, and design and composition.

**ART 120** Profs. Lehman, Podhurst
**Painting I** 3 credits
(Prerequisite: ART 112, 116 or equivalent) A first-level painting course concerned with fundamentals such as composition, observation, basic color theory and basic techniques. The class includes one museum trip and regular group critiques.

## ART HISTORY

**ARMU 140-141** Dr. Dunn, Staff
**(C)Perceiving the Arts** 3 credits each
This two-semester course offers a cross-disciplinary introduction to art and music in a pervasive study of these art forms as they inform and are informed by the societies in which they were created. Classes include (but are not limited to) lectures, lab discussions, guest lectures, museum, concert/opera trips. Course restricted to ELED majors.

**ARTH 111** Dr. Dunn, Prof. Long
**(C)History of World Art I** 3 credits
A survey of the history of painting, sculpture, and architecture from prehistoric times through the dawn of the Renaissance in 1400. The art of ancient eastern and western civilizations is studied in historical contexts of idea, style, and technique.

**ARTH 112** Drs. Dunn, Miller-Lanning
**(C)History of World Art II** 3 credits
The course opens with the history of painting, sculpture, and architecture in Renaissance, Baroque, and eighteenth-century Europe. Introduced by Impressionism, Expressionism, and Cubism, the study of the art of the modern world concludes with a survey of idea, style, and technique in twentieth-century art. ARTH 111 not a prerequisite.

**ARTH 113** Staff
**(C,D)Topics in Non-Western Arts** 3 credits
This course focuses on the history of painting, sculpture and architecture produced by non-western and ethnographic cultures: including, but not limited to, African, Oceanic, Native American, Japanese, Chinese, Islamic, and Indian Art. Courses will vary according to student and faculty interest.

**ARTH 114** Staff
**(C,W)History of Architecture** 3 credits
A general survey of architectural history from the prehistoric through the modern era, focusing on architectural style, the built environment, and the rituals which condition the use and design of structures and urban spaces. The course features walking tours of Philadelphia and the city of Scranton, as well as guest lectures by area architects.

**ARTH 115** Dr. Dunn
**Art of the Ancient World** 3 credits
(Formerly ARTH 201) A survey of the art and architecture produced between 30,000 -1250 B.C. The course opens in the painted caves of Prehistoric Europe, and continues through the contemporaneous civilizations of the Ancient Near East (Sumer, Babylon, Assyria, Persia) and Egypt.

**ARTH 116** Prof. Long
**(C,W)Art of Greece and Rome** 3 credits
(Formerly ARTH 202) The course begins in the Aegean with the Minoan and Mycenaean cultures celebrated by Homer; surveys the art of classical Greece, and continues with the art of the Etruscans in ancient Italy. The course concludes with Roman art and architecture (3rd c. B.C. - 5th c. A.D.).

**ARTH 117** Dr. Dunn
**(W)Early Christian and Byzantine Art** 3 credits

(Formerly ARTH 203) The art and architecture produced by the first Christians borrowed much from the forms and ideas of Roman art. The course surveys art produced in Rome, Ravenna, Milan, Greece and Constantinople, 200-1400 A.D. Emphasis will be placed on the origin and symbolism of Christian imagery and architecture.

**ARTH 118** Dr. Dunn
**(W)Medieval Art: Romanesque and Gothic** 3 credits

(Formerly ARTH 204) A survey of art and architecture in western Europe, 1100-1400. Medieval architecture, manuscripts, paintings, and decorative arts will be presented as mirrors of medieval thought and spirituality.

**ARTH 205** Dr. Dunn
**The Icon in Russian and East European Art** 3 credits

This course focuses on theology, image and artistic style in the making of the icon in Russia and East Europe. The icon will be studied in its historical and cultural context from medieval through modern times.

**ARTH 210** Staff
**(C,D)Topics on Women in the Visual Arts** 3 credits

This cross-disciplinary course presents selected topics on women in the visual arts, including the history of women's achievements and struggles in the visual arts, varied ways of thinking and writing about women, art and culture. Topics will include, but are not limited to: Survey of Women in Art; Being Female in the Renaissance, Medieval Women in Image and Text; Contemporary Women Artists; The Female Artist in Latin America; Women Artists in America; 19th-Century Women Artists, etc.

**ARTH 213** Dr. Miller-Lanning
**(C)American Art** 3 credits

A survey of American architecture, painting and sculpture from the earliest exploration days. The course will cover art of Native America, the colonial period, the Civil War era and the twentieth century.

**ARTH 214** Dr. Dunn
**(C)Renaissance Art and Architecture: 1250-1500** 3 credits

(Formerly ARTH 310) A survey of the art produced in Italy, 1250-1500, the course opens with Cimabue in Assisi of St. Francis, continues into the fourteenth century with the frescoes of Giotto and Duccio, and concludes with such fifteenth-century artists as Brunelleschi, Donatello, Botticelli, Leonardo da Vinci, and the young Michelangelo.

**ARTH 215** Dr. Dunn
**The Renaissance in Northern Europe** 3 credits

(Formerly ARTH 311) Art produced in northern Europe (France, Germany, Belgium, and the Netherlands) differs remarkably from the art produced in Italy by Botticelli and Michelangelo. This course surveys painting north of the Alps by such artists as Jan van Eyck, Rogier van der Weyden, Hieronymus Bosch, and Albrecht Dürer.

**ARTH 216** Dr. Dunn
**(C,W)Michelangelo and His World** 3 credits

(Formerly ARTH 410) This course investigates the painting, sculpture, and architecture of Michelangelo. By considering the artistic traditions to which he fell heir as a Florentine artist, the traditional and the innovative aspects of Michelangelo's work will be assessed. Readings from his letters and poetry, and from sixteenth-century biographies will furnish a rich context for the appreciation of his work and for understanding the society to which he belonged.

**ARTH 217** Dr. Dunn
**(W)Leonardo (Da Vinci)** 3 credits

(Formerly ARTH 411) Artist, scientist, author and free-thinker, Leonardo left few paintings, many drawings, and copious notes attesting the wide range of his intellectual curiosity. This course focuses both on the fifteenth-century world to which the artist belonged and on his many writings in order to measure Leonardo's greatness as prodigy and visionary.

**ARTH 218** Prof. Long
**(W)The Age of Rembrandt** 3 credits
(Formerly ARTH 303) A survey of the painting, sculpture, and architecture produced in Europe between 1600 and 1750. The course opens in Bernini's Rome of the Counter-Reformation and concludes in France at the royal courts of Louis XIV and XV.

**ARTH 220** Staff
**History of Photography** 3 credits
The course explores the historical development of photography and considers the medium's aesthetic components as well as the theoretical and representational issues it raises.

**ARTH 221** Dr. Miller-Lanning
**Nineteenth-Century Art** 3 credits
(Formerly ARTH 304) An exploration of painting and sculpture from Neoclassicism to Symbolism. Special emphasis will be given to works by J.L. David, Goya, Delacroix, Courbet, Manet, Morisot, Rodin, and Van Gogh. In addition to developing skills of visual analysis, the course will focus on the interaction between artist and society.

**ARTH 222** Dr. Miller-Lanning
**Impressionism and Post-Impressionism** 3 credits
(Formerly ARTH 312) Impressionism, an artistic movement linked today with leisure and pleasure, developed out of conflict and challenged many standard European art practices. The course investigates the artistic goals and strategies of Manet, Monet, Degas, Renoir, Morisot, Cassatt and Pissarro, and considers how their works respond to important social issues of the day. Paintings by the Postimpressionists Cézanne, Seurat, Van Gogh and Gauguin will be examined as reactions to the aims of Impressionism.

**ARTH 225** Dr. Miller-Lanning
**Art of the Twentieth Century** 3 credits
(Formerly ARTH 305) Beginning with pre-World War I works by Matisse and Picasso, this course surveys the painting, sculpture, architecture and photography of the period known as modernism, ending with an exploration of the contemporary phenomenon of postmodernism. Through examination of both artworks and texts by artists and critics, considerations of style and technique will be integrated with an analysis of historical context.

**ARTH 227** Dr. Miller-Lanning
**Matisse and Picasso** 3 credits
(Formerly ARTH 315) This course examines the works of these two influential modern artists by considering the aesthetic and historical context for their paintings, sculptures, prints, and writings on art.

**ARTH 295-296** Dr. Dunn
**(Travel Seminar)**
Short study trips to provide students with the opportunity to study works of painting, architecture, and sculpture on site. Trips will be designed as themes: i.e., the Art Museums of London and Paris, The Bible in Text and Image (Italy), Renaissance Villas and Palaces, Michelangelo, etc.

**ARTH 380** Drs. Dunn, Miller-Lanning
**Museum Methods** 1-3 credits
(Prerequisites: ARTH 111, 112 and two additional ARTH courses) Offered in cooperation with the Everhart Museum, this course introduces students to ideologies of arts administration and methods of curatorial research and procedure. On-site study at the Everhart Museum is supervised by the Curator of Art and by art history faculty.

**ARTH 384, 484** Dr. Dunn
**Special Topics** 3 credits
(Prerequisites: ARTH 111, 112 and two additional ARTH courses) Selected topics will vary from year to year on the basis of student/faculty interest and available media resources. Topics may include Art of the Far East, History of Printmaking, etc. Discrete styles and individual artists may also be the focus of a selected topics course.

## MUSIC

**MUS 111** Staff
**(C)Music History I** 3 credits
The history and literature of Western classical music from the medieval period to the eighteenth century, including Gregorian chant, the growth of polyphony, the rise of instrumental music and the birth and growth of opera.

**MUS 112** Staff
**(C)Music History II** 3 credits
The history and literature of Western classical music from the eighteenth century to the present, including the increasing importance of instrumental music and opera, the development of atonality and serial music, and the recent avant-garde. MUS 111 is not a prerequisite.

**MUS 211** Prof. Garofalo
**Keyboard Music** 3 credits
Music written for the piano, organ, harpsichord and clavichord from the Renaissance to the twentieth century. The course focuses on the development of keyboard instruments and the forms and composers that dominate the literature.

**MUS 213** Prof. Garofalo
**Symphony** 3 credits
Development of the symphony as an independent genre, from its origins in the mid-eighteenth century to the present day. Works by Haydn, Mozart, Beethoven, Brahms, Tchaikovsky, Mahler, Shostakovich and Stravinsky will be among those considered.

**MUS 217** Staff
**Opera** 3 credits
The history of opera from its beginnings at the turn of the seventeenth century to the present with an emphasis on the nineteenth and twentieth centuries. Representative operas by Mozart, Verdi, Wagner and Puccini, among others, will be examined.

**MUS 218** Dr. Perry
**American Musical Theatre** 3 credits
The development of musical theatre in America from the nineteenth century to the present, emphasizing works composed since the 1940s. Musicals by Jerome Kern, Rodgers and Hammerstein, Lerner and Loewe, Leonard Bernstein and Stephen Sondheim will be considered.

**MUS 219** Prof. Buckley
**History of Jazz** 3 credits
A detailed examination of a "truly American musical form." Included will be discussions of major stylistic periods, compositions, and performers. Listening examples, as well as live performances, will contribute to an understanding of jazz from its origins to the present day.

**MUS 222** Staff
**Bach** 3 credits
(Formerly MUS 323) The music of Johann Sebastian Bach in the context of the musical forms, styles, and genres current in the first half of the eighteenth century. A survey of Bach's life and works is followed by detailed study of selected vocal and instrumental compositions.

**MUS 223** Staff
**Mozart** 3 credits
(Formerly MUS 324) An examination of Mozart's major works in the genres of symphony, concerto, chamber music, church music and opera, together with a brief biographical survey. The influence of late eighteenth-century culture and musical conventions on Mozart's work is considered.

**MUS 225** Staff
**Beethoven** 3 credits
(Formerly MUS 325) Study of a composer whose fiery personality drove him to express through music universal concepts in an age of revolution, i.e., freedom and the dignity of the person. Course traces the evolution of Beethoven's major works — sonatas and concertos, symphonies and string quartets as well as Fidelio and the Missa Solemnis — and the effect of his deafness on his view of life and on his later works.

**MUS 226** Staff
**Romantic Music of the Nineteenth Century** 3 credits
A study of the major musical developments in the nineteenth century, the Romantic Period: the rise of piano literature, the art song, chamber and program music, and opera. Attention to nationalism.

**MUS 228** Staff
**Music of the Twentieth Century** 3 credits
(MUS 112 recommended as prerequisite) A study of the history and literature of Western classical music in the twentieth century. The various "isms" of the period, including impressionism, expressionism, neo-classicism, serialism and minimalism, will be examined.

**MUS 233** Staff
**Music in America** 3 credits
An overview of music in the United States from colonial times to the present, with an emphasis on the twentieth century. Classical, popular and traditional musical styles are considered, including the symphony, the opera, the Broadway show, jazz, rock, hymnody, and folk music.

**MUS 235** Dr. Perry
**Music Theory I** 3 credits
The fundamental materials of tonal music: notes and rests, rhythm and meter, scales and modes, intervals, triads and seventh chords, melodic and harmonic organization, and an introduction to voice leading and part writing. Some knowledge of music notation helpful.

**MUS 236** Dr. Perry
**Music Theory II** 3 credits
(Prerequisite: MUS 235) Extension of the tonal vocabulary to include chromatic harmony, modulatory techniques, and the use of extended chords, as well as an overview of selected post-tonal procedures.

**MUS 280** Staff
**Liturgical Music** 3 credits
The role of music in the Roman Catholic Church. Emphasis on the practical rather than the historical. Recommended for any lay person or member of the clergy involved in developing church liturgy. No musical background required.

**MUS 335** Staff
**Introduction to Composition** 3 credits
(Prerequisite: MUS 235 and 236) Guided individual projects in original composition, together with the analysis of selected works from the classical repertory.

**MUS 284** Staff
**Special Topics** 3 credits
Selected topics in music history will vary from year to year in accord with student/faculty interest.

# BIOLOGY

*DR. MICHAEL A.HARDISKY, Chairperson*

Courses in the Department of Biology are designed to achieve the following objectives: 1. To present the fundamental scientific facts and concepts which are needed for an understanding of the living world and people's relation to it; 2. To prepare students for advanced study or work in other biological fields.

The Bachelor of Science degree in biology program supplies preprofessional preparation meeting all requirements and recommendations of professional schools (medicine, dentistry, veterinary medicine).

While the department's record in the preparation of physicians is an impressive one as indicated in the Pre-Medical section, its record as one of the baccalaureate sources of Ph.D.'s in the biological sciences is equally prestigious. In this respect, a 1988 study by the Office of Institutional Research at Franklin and Marshall College shows that over the last 66 years, The University of Scranton ranked 48th out of 877 four-year private, primarily undergraduate, institutions.

The biology curriculum appears below. In addition to the nine-credit freshman course in general biology, biology majors will select 33 credits of biology electives with at least one course in each of the following five course groups (special exemption may be made by permission of the chairperson):

Cellular (C) - BIOL 250, 344, 346, 348, 349, 350, 351, 352, 354, 358, 445, 450
Molecular (M) - BIOL 250, 263, 344, 350, 351, 358, 361, 362, 364
Organismal (0) - BIOL 195, 196, 241, 243, 245, 250, 344, 345, 346, 347, 348, 349, 351, 354, 370, 445, 446, 473
Genetics (G) - BIOL 260, 263, 361, 362, 375
Population (P) - BIOL 195, 196, 272, 273, 345, 349, 370, 371, 375, 471, 472, 473

Biology majors may use up to six credits in chemistry (CHEM 350, 351, 360, 450, 451) as biology electives.

The premedical advisor's elective recommendations for pre-professional students are listed on page 345.

**MINOR:** To gain a minor in biology, a student must complete Biology 141-142 including the laboratory, and 15 additional credits of courses suitable for the biology major. Biology electives must be selected to fill at least three of the five established course groups, and must include at least three credits of advanced laboratory work. It is strongly suggested that a potential biology minor seek the advice of the department's chairperson concerning the selection of electives suitable to his/her personal goals.

*** Please note: Biology courses numbered 100-139 and 200-239 are not open to Biology majors. Courses with a title prefixed by an asterisk require concurrent enrollment in lecture and lab.**

# BIOLOGY

| | Dept. and No. | Descriptive Title of Course | Credits FALL | SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| MAJOR (GE NSCI) | BIOL 141 -142 | General Biology | 4½ | 4½ |
| COGNATE | CHEM 112 -113 | General Analytical Chemistry I-II | 4½ | 4½ |
| GE WRTG-SPCH | WRTG 107- COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | | 3 |
| GE PHIL | PHIL 120 | Introduction to Philosophy | 3 | |
| GE HUMN | HUMN ELECT | Elective | | 3 |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| | | | **16** | **18** |
| | | **SECOND YEAR** | | |
| MAJOR | BIOL | Biology Electives | 4½ | 4 |
| COGNATE | CHEM 232 - 233 | Organic Chemistry I -II | 4½ | 4½ |
| GE QUAN-COGNATE | MATH 103 -114[1] | Pre-Calculus Math. - Analysis I | 4 | 4 |
| GE S/BH | S/BH elect | Elective | | 3 |
| GE PHIL - T/RS | PHIL 210-T/RS 121 | Ethics-Theology I | 3 | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | |
| | | | **17** | **18½** |
| | | **THIRD YEAR** | | |
| MAJOR | BIOL | Biology Electives | 4½ | 5 |
| COGNATE | PHYS 120-121 | General Physics I-II | 4 | 4 |
| GE S/BH | S/BH ELECT | Elective | 3 | |
| GE HUMN | HUMN ELECT | Electives | 3 | 3 |
| GE T/RS | T/RS 122 | Theology II | 3 | |
| GE ELECT | ELECT | Free Elective | | 3 |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **17½** | **16** |
| | | **FOURTH YEAR** | | |
| MAJOR | BIOL | Biology Electives | 7½ | 7½ |
| GE PHIL or T/RS | PHIL or T/RS | Elective | | 3 |
| GE HUMN | HUMN ELECT | Elective | 3 | |
| GE ELECT | ELECT | Free Elective | 6 | 3 |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **16½** | **14½** |
| | | | **Total: 134 CREDITS** | |

[1]MATH 103 (taken before MATH 114) if indicated by Math Placement Test. Otherwise, credits may be taken in math, biology, chemistry or physics.

**BIOL 100** Staff
*** Modern Concepts of Biology** 4 credits
Exploration of the practical impact which modern biological concepts have on our lives. Topics include cell function, genetics, plant and human biology, genetic engineering, cancer, AIDS and dying. Provides a framework for making informed ethical decisions as a citizen regarding pertinent biological issues. 3-hour lecture; 2 hours lab. Fall only.

**BIOL 101** Dr. Sweeney
**(E)Introduction to Biological Science** 3 credits
An introduction to the fundamental concepts, principles and theories of modern biology. Critical components of the course include a discussion and application of the scientific method in discovery and learning, discussion of experimental and statistical techniques, examination of the historical and cultural fabric of biological science, and discussion of the impact of biological research and development on modern society. 3-hour lecture.

**BIOL 105** Dr. Conway
**(E)Biodiversity** 3 credits
An examination of the variety of animal and plant species, especially in the two most diverse ecosystems: the coral reef and the tropical rain forest. The foundations of biological diversity will be studied: ecology, systematics, evolution and biogeography. The effects of historical, cultural, economic, religious and political forces on biodiversity will be analyzed. Current topics will be discussed, such as deforestation, human population growth, endangered species and global warming. 3-hour lecture.

**BIOL 108** Dr. Voltzow
***(E)History of Life on Earth** 3 credits
Sequence of appearance of life on earth based on the geological record. Topics include the origin of life on earth, patterns and processes of the fossil record, and an introduction to the diversity of life, past and present. 3-hour lecture.

**BIOL 110 & 111** Staff
***(E)Structure and Function of the Human Body** 8 credits
A general study of the anatomy and physiology of the human organism, emphasizing the body's various coordinated functions from the cellular level to integrated organ systems. 3-hour lecture, 2 hours lab each semester.

**BIOL 141 & 142** Staff
***(E)General Biology** 9 credits
A comprehensive study of the nature of living organisms, both plant and animal, their structure, function, development and relationships, including the problems of development, heredity and evolution. 3-hour lecture, 3-hour lab each semester.

**BIOL 195** Dr. Conway
**(E)Tropical Biology (O, P)** 3 credits
Study of tropical communities with emphasis on the coral reef. Introduction to a variety of other tropical areas, such as sandy beaches, turtle grass beds, mangrove swamps, tide pools, rocky shores, and rainforests. Approximately two weeks will be spent at a biological station in the American tropics. Swimming proficiency required. Intersession only.

**BIOL 196** Dr. Conway
**(O,P)African Photo Safari** 3 credits
Natural history of Eastern Equatorial Africa with special emphasis on the delicate ecological balance between plant and animal communities. The savannah plains, tropical mountain forests, northern frontier and Great Rift Valley will be visited for first-hand study of the tremendous diversity of fauna and flora. Intersession only.

**BIOL 201** Dr. Kwiecinski
**(E)Anatomy & Physiology** 3 credits
(Prerequisite: BIOL 101) An introduction to the biochemical, cellular, tissue and organismal organization of selected body functions; structure in relation to function is emphasized. 3-hour lecture.

**BIOL 202** Dr. McDermott
**(E)The ABC's of Genetics** 3 credits
(Prerequisite: BIOL 101) Heredity for the non-science major, with emphasis on the human. Provides the background necessary for the non-scientist to understand his/her own hereditary background and to have informed opinions about societal issues related to genetics. Includes Mendelian, molecular, and population genetics, evolution, genetic diseases, genetic engineering, etc. 3-hour lecture.

**BIOL 210** Dr. McDermott
***Introductory Medical Microbiology** 3 credits
(Pre- or co-requisites: BIOL 110-111; CHEM 110-111) Fundamentals of microbiology, including structure, function, identification, pathogenesis, epidemiology and control of microorganisms with emphasis on human pathogens. 2 hours lecture, 2 hours lab. Fall only.

**BIOL 241** Fr. MacEntee
***Comparative Vertebrate Anatomy (O)** 5 credits
(Prerequisite: BIOL 141-142) Structure and phylogeny of vertebrate organ-systems, emphasizing and comparing vertebrate structures in relation to their functions. Amphioxus, shark, necturus, and the fetal pig are subjected to detailed laboratory study. 3-hour lecture, 4 hours lab. Fall only.

**BIOL 243** Fr. MacEntee
***The Human Body (O)** 5 credits
(Prerequisites: BIOL 141-142) Structure and function of the principal organ systems in mammals, emphasizing the human condition. The cat is subjected to detailed study in the laboratory. 3-hour lecture, 4 hours lab. Spring only.

**BIOL 245** Staff
***General Physiology (O)** 4½ credits
(Prerequisites: BIOL 141-142, CHEM 112-113) Physiological processes underlying functioning of the animal organism. Study of irritability, excitation, conduction, contractility, cellular physiology, and functions of mammalian organ-systems. 3-hour lecture, 3-hour lab.

**BIOL 250** Fr. Beining, Dr. Sulzinski
***Microbiology (C, O, M)** 5 credits
(Prerequisite: BIOL 141-142, CHEM 112-113) Structure, function, growth, reproduction, heredity and relationships of bacteria, yeasts, molds, viruses; a brief survey of pathogens, life cycles of parasitic microzoa; introduction to disease and immunology. 3-hour lecture, 4 hours lab; not open to Nursing majors.

**BIOL 260** Dr. McDermott
**Genetics (G)** 4½ credits
(Prerequisite: BIOL 141-142) Mendelian, cyto-, population and evolutionary, and basic molecular genetics; emphasis on eucaryotes. 3-hour lecture, 3-hour lab.

**BIOL 263** Dr. Dwyer
***Genetic Engineering** 5 credits
(Prerequisite: BIOL 141-142) Study of the nature and function of the gene with emphasis on the experimental evidence which gave rise to the present concepts of genetic engineering. Strong emphasis is placed on recombinant DNA techniques in both lecture and laboratory. 3-hour lecture, 3-hour lab.

**BIOL 272** Dr. Voltzow
***Invertebrate Biology (O,P)** 5 credits
(Prerequisite: BIOL 141-142) Structure and function of the major groups of invertebrates with emphasis on their evolutionary relationships. Labs focus on the diversity of invertebrate forms and include field trips. 3-hour lecture, 3-hour lab. Fall, odd years.

**BIOL 273** Dr. Voltzow
**Marine Ecology (P)** 3 credits
(Prerequisite: BIOL 141-142) Diversity of marine habitats and of the organisms that inhabit them. Lectures and discussion address the physical and biological factors that influence the distribution and ecology of organisms in the various marine environments, including intertidal, estuarine, benthic, coral reef, and open ocean communities. The effects of humans on the sea will be assessed. 3-hour lecture. Fall, even years.

**BIOL 344** Fr. Beining
**Principles of** 4½ credits
**Immunology (C,O,M)**
(Prerequisite: BIOL 250 strongly recommended for 344 lecture, required for 344 lab) The basic molecular, cellular and organismal aspects of the immune response, emphasizing chemical and functional bases of antigens and immunoglobulins, cellular and humoral response, tolerance, immune deficiency, hypersensitivity, autoimmunity, blood groups, transplantation. 3-hour lecture, 3-hour lab. Spring only.

**BIOL 345** Dr. Voltzow
**Comparative Animal** 3 credits
**Physiology (P,O)**
(Prerequisite: BIOL 245) The physiological principles involved in adaptations of animals to their environment from a comparative viewpoint; osmotic control, temperature regulation, nerve and muscle physiology, sensory perception, etc. 3-hour lecture.

**BIOL 346** Dr. J. Carey
**Endocrinology and** 3 credits
**Reproduction (C,O)**
(Prerequisite: BIOL 245) The mammalian endocrine system; emphasis on molecular mechanisms of hormone action, feedback control of hormone production, integration with other physiological systems, and reproductive endocrinology. 3-hour lecture. Spring only.

**BIOL 347** Dr. Conway
**Exercise Physiology (O)** 3 credits
(Prerequisite: BIOL 245) Study of the anatomical and physiological effects of exercise, centering around control of physical performance by capacity to generate energy through aerobic and anaerobic pathways; includes the effects of heredity, age, nutrition, training and environment on performance. Emphasizes the multidimensional role of exercise in weight control, cardiovascular fitness, stress management, fatigue, strength, etc. 3-hour lecture/demonstration. Spring, odd years.

**BIOL 348** Staff
**Neurophysiology (C, O)** 4½ credits
(Prerequisite: BIOL 245, or, for neuroscience majors, PSYC 231) Study of the organization and function of the neuron, neural circuits, and the major sensory and motor components of the central nervous system; bioelectric phenomena, synaptic transmission; the neural basis for higher functions such as cognition, memory, and learning. 3-hour lecture; 3-hour lab.

**BIOL 349** Dr. Hardisky
**Plant Physiology (C, O, P)** 5 credits
(Prerequisite: BIOL 141 or 101 or permission of instructor) Functional anatomy and physiology of plants, including structure, photosynthesis, respiration, mineral nutrition, water relations, productivity, growth and differentiation, transport, stress physiology, and energy flow. 3-hour lecture, 3-hour lab. Spring, odd years.

**BIOL 350** Staff
*** Cellular Biology (C, M)** 5 credits
(Prerequisite: BIOL 141-142) Study of structure-function relationships in eukaryotic cells. Emphasis on cell membranes, cell organelles, cytoskeleton, and extracellular matrices. Regulation of cell proliferation, signaling, recognition/adhesion and motility will be examined, particularly as they relate to malignancy. Labs focus on experimental studies of cellular structure and function using techniques of modern cell biology. 3-hour lecture, 3-hour lab. Lab fulfills a Writing-Intensive requirement (W). Fall only.

**BIOL 351** Staff
*** Developmental** 5 credits
**Biology (C, O, M)**
(Prerequisite: BIOL 141-142) Development of vertebrates and invertebrates from gametogenesis through organogenesis. Emphasis on cellular and molecular mechanisms involved in differentiation, morphogenesis, and determination of the body plan. Labs focus on experimentation with living, developing organisms. 3-hour lecture, 3-hour lab. Spring only.

**BIOL 352** Dr. Kwiecinski
*** Histology (C)** 5 credits
(Prerequisite: BIOL 141-142; strongly recommended: BIOL 241) Microscopic structure and function of the four basic vertebrate tissues. Emphasis will be placed on mammalian tissues. Lectures include historical, theoretical and practical perspectives. Laboratories include examination of tissues through the use of loan sets of slides as well as demonstrations and exercises in basic preparation of tissues for microscopic examination. 3-hour lecture, 4 hours lab. Fall only.

**BIOL 354** Dr. Kwiecinski
**Special Histology:** 5 credits
(Prerequisites: CHEM 232-233; BIOL 352) Microscopic recognition and functional correlations of the major vertebrate organ systems. Enrollment is limited to preserve informal and flexible working conditions appropriate to advanced histological work. This course is customized to the participants' needs. Options include in-depth training in techniques or in-depth analysis of a particular organ system. 2 hours lecture, 5 hours lab. Spring only.

**BIOL 358** Staff
**Cellular and Molecular Neurobiology (C, M)** 3 credits
(Prerequisites: BIOL 141-142) Introduces Biology and Neuroscience majors to the cellular and molecular biology of the vertebrate nervous system. Includes ion channel structure and function, synthesis, packaging and release of neurotransmitters, receptor and transduction mechanisms, intracellular signalling, cell-to-cell communication, glial cell function, and neural growth and development. 3-hour lecture.

**BIOL 361** Dr. Dwyer
*** Molecular Biology I (M, G)** 5 credits
(Prerequisites: BIOL 141-142, CHEM 232-233) Structure and function of prokaryotic cells from a molecular viewpoint. Study of biomacromolecule structure and function; bacterial DNA replication, transcription, translation and how these processes are regulated. 3-hour lecture, 3-hour lab. Fall only.

**BIOL 362** Dr. Dwyer
**Molecular Biology II (M, G)** 5 credits
(Prerequisite: BIOL 361 or CHEM 350) The structure and function of eucaryotic cells and organisms from a molecular viewpoint. Study of eucaryotic genome and gene organization, DNA packaging and replication, RNA transcription and splicing, translation into proteins and how these processes are regulated. Discussion of HIV, cancer, and evolution on the molecular level. 3-hour lecture, 3 hour lab optional. Spring only.

**BIOL 364** Dr. Sulzinski
*** Virology (M)** 5 credits
(Prerequisites: BIOL 141-142; CHEM 232-233) A detailed survey of viruses important to animals and plants, including structure, replication, pathogenicity and diagnostic techniques. Strong emphasis is placed on the molecular biology of viruses in both lecture and lab. 3-hour lecture, 3-hour lab. Fall only.

**BIOL 370** Dr. M. Carey
**Animal Behavior (P, O)** 4½ credits
(Prerequisite: BIOL 141-142)
Classification of behavior types, development, functional advantages and evolution of behavior, and social and physiological aspects studied in lower and higher organisms. 3-hour lecture, 2 hours lab. Spring only. The laboratory fulfills a Writing-Intensive requirement (W).

**BIOL 371** Dr. Townsend
**Ecology (P)** 5 credits
(Prerequisites: BIOL 141-142) Study of physical, chemical, and biological factors that influence the distribution and abundance of organisms and determine the relationships among organisms from the population to the ecosystem level. 3-hour lecture, 3-hour lab. Fall only.

**BIOL 375** Dr. M. Carey
**Evolution (G, P)** 3 credits
(Prerequisites: BIOL 141-142) A consideration of the theories of evolution and evidences for them in plants and animals. Population genetics and the adaptiveness of various organic traits will be discussed. 3-hour lecture. Fall only.

**BIOL 379** Dr. Townsend
**Biostatistics** 3 credits
(Prerequisite: MATH 103) Data analysis and statistical techniques in biology and medicine; probability and frequency distributions, descriptive statistics, hypothesis testing, and various parametric and nonparametric statistical tests. Use of one or more computerized statistical programs. 3-hour lecture. Spring only.

**BIOL 384** Staff
**Special Topics in Biology** 2-4 credits
Study of selected topics in biology, varying from year to year in accord with student/faculty interest and current research advances. May include such topics as sensory reception, membrane biology, population genetics, etc.

**BIOL 393-394** Staff
**Undergraduate Research** Variable credit
(Prerequisite: 12 credits in Biology) Individual problems for advanced students with sufficient background in biological and physical sciences.

**BIOL 445** Dr. Kwiecinski
**Mammalian Physiology (C, O)** 3 credits
(Prerequisites: BIOL 245 and CHEM 232-233) Molecular, cellular, and tissue aspects of selected organ systems not normally covered in General Physiology, including calcium and skeletal homeostatic systems, integumentary system, gastrointestinal system, and aspects of nervous, endocrine, reproductive, and lymphatic systems. 3-hour lecture.

**BIOL 446** Dr. Sweeney
**Cardiovascular Physiology (O)** 3 credits
(Prerequisites: BIOL 245 and PHYS 120 or 140) The physiological and biophysical bases of cardiovascular function; including cardiac electrophysiology and mechanics; regulation of the heart and the peripheral circulation; hemodynamics; solute and fluid exchange; and cell-cell interactions governing white blood cell transit. Special circulations will highlight the role of cardiovascular regulation in overall physiological function. 3-hour lecture.

**BIOL 450** Staff
***Electron Microscopy (C)** 5 credits
(Prerequisites: BIOL 141-142) Introduction to the mechanics of the electron microscope with emphasis on standard laboratory techniques, including preparation of materials, sectioning, viewing and photographic analysis. 1-hour lecture, 6-hour lab.

**BIOL 471** Staff
**Applied Ecology (P)** 3 credits
(Prerequisite: BIOL 371) The application of ecological principles and concepts to environmental problems, including consideration of their origins, effects on living systems, and potential solutions. Consideration of such issues as biodiversity, habitat degradation and loss, conservation biology, ecosystem management, wildlife ecology, agroecology, pollution, and global climate change. 3-hour lecture.

**BIOL 472** Dr. Hardisky
**Systems Ecology (P)** 3 credits
(Prerequisite: BIOL 371) The study of ecosystem dynamics and their relationship to the functioning of the biosphere. A quantitative approach to ecosystem structure and function, emphasizing the use of simulation and conceptual models. The course will involve opportunities to construct and test simulation models. 3-hour lecture. Spring, even years.

**BIOL 473** Dr. Hardisky
**Estuarine Ecology (O, P)** 5 credits
(Prerequisites: BIOL 141 or 101 or permission of instructor) The ecology of marine and estuarine systems, including soil chemistry, halophyte physiology, tidal marsh ontogeny, ecosystem function and the consequences of human alteration of the coastal zone. Lab includes a week-long field trip during Spring Break to Sapelo Island, Georgia, and Cocodrie, Louisiana. 3-hour lecture, 3-hour lab.

# CHEMISTRY

*DR. DAVID E. MARX, Chairperson*

The department offers five majors: Chemistry, Biochemistry, Chemistry-Business, Chemistry-Computers, and Medical Technology. The program in Chemistry is approved by the American Chemical Society, which means that graduates may be certified by the American Chemical Society if they meet the requirements. In addition, outstanding students in the Chemistry and Biochemistry majors are eligible for consideration in the Combined, Five-Year Baccalaureate/Master's Degree program (please refer to the section on The Graduate School, page 325, and to the Graduate School Catalog for specifics of the program). The strength of the department is indicated by the fact that the University of Scranton has been one of the leading schools in the country in the number of master's degrees awarded in chemistry.

The prestige of the department is also demonstrated by a study of the Office of Institutional Research at Franklin and Marshall College which ranked the University of Scranton 34th out of 917 private, four-year, primarily undergraduate colleges as the baccalaureate source of those earning Ph.D.'s in Chemistry between 1981 and 1990.

Recent graduates of the department have been admitted to doctoral programs at a number of major universities including Harvard, Cornell, Johns Hopkins and the University of Pennsylvania. In addition some graduates have attended medical and dental schools, and some have gone on to law school.

**CHEMISTRY**

| | Dept.and No. | Descriptive Title of Course | Credits FALL | SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| MAJOR (GE NSCI) | CHEM 112-113 | General Analytical Chem. I-II | 4½ | 4½ |
| COGNATE (GE QUAN) | MATH 114-221 | Analysis I-II | 4 | 4 |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | 3 | |
| GE T/RS-PHIL | T/RS 121-PHIL 120 | Theology I-Introduction to Philosophy | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | | 3 |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| | | | **18½** | **17½** |
| | | **SECOND YEAR** | | |
| MAJOR | CHEM 232-233 | Organic Chemistry I-II | 4½ | 4½ |
| MAJOR | CHEM 240 | Inorganic Chemistry | | 3 |
| COGNATE | MATH 222[1] | Analysis III | 4 | |
| COGNATE | PHYS 140-141 | Elements of Physics | 4 | 4 |
| GE PHIL-T/RS | PHIL 210-T/RS 122 | Ethics-Theology II | 3 | 3 |
| GE ELECT | CMPS 134 | Computer Science I | | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | |
| | | | **16½** | **17½** |
| | | **THIRD YEAR** | | |
| MAJOR | CHEM 330 | Organic Chem. III | 5 | |
| MAJOR | CHEM 370 | Instrumental Analysis | | 5 |
| MAJOR | CHEM 362-363 | Physical Chem. I-II | 4½ | 4½ |
| MAJOR | CHEM 390-391 | Chem. Literature-Seminar | 1 | 1 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE S/BH | S/BH ELECT | Social Behavioral Electives | 3 | 3 |
| GE PHED | PHED ELECT | Physical Education Electives | 1 | 1 |
| | | | **17½** | **17½** |
| | | **FOURTH YEAR** | | |
| MAJOR | CHEM 440-440L | Adv. Inorganic Chem.-Lab | 3 | 1½ |
| MAJOR | CHEM 493-494 | Undergraduate Research | 1½ | 1½ |
| MAJOR | CHEM ELECT | Chem Elec.-300 Level or above | 3 | |
| GE T/RS or PHIL | T/RS or PHIL | Elective | | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | 3 | |
| GE ELECT | ELECT | Free Electives | 3 | 6 |
| | | | **13½** | **12** |

**Total: 130½ CREDITS**

[1] For ACS certification, Chemistry majors must complete MATH 222, MATH 341, CHEM 350 or 450, and one upper-division chemistry elective.

The **MINOR** in Chemistry will include the following requirements: Organic Chemistry (6 credits), Physical Chemistry (6 credits), and a chemistry laboratory course (3 credits).

# BIOCHEMISTRY

The department offers two tracks of study for biochemistry majors. The tracks are similar for the first three semesters, allowing students the option to change between the two tracks within that time frame, should their career goals change. The research track prepares students for graduate study in biochemistry or for a career in which independent research experience would be beneficial. The pre-professional track is more flexible and allows students a greater selection of elective courses in chemistry and biology in order to tailor their course of study to meet their individual career goals. The pre-professional track provides a strong background for students pursuing further studies in law, medicine or career paths not emphasizing research

## BIOCHEMISTRY RESEARCH TRACK

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **SPRING** |
| MAJOR (GE NSCI) | CHEM 112-113 | General Analytical Chem. I-II | 4½ | 4½ |
| COGNATE (GE QUAN) | MATH 114 | Analysis I | 4 | |
| COGNATE | BIOL 141-142 | General Biology I-II | 4½ | 4½ |
| GE WRTG-SPCH | WRTG 107 - COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | | 3 |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education Elective | | 1 |
| | | | **17** | **16** |
| | | **SECOND YEAR** | | |
| MAJOR | CHEM 232-233 | Organic Chemistry I-II | 4½ | 4½ |
| MAJOR | CHEM 240 | Inorganic Chemistry | | 3 |
| COGNATE | PHYS 120-121[2] | General Physics I-II | 4 | 4 |
| GE ELECT | CMPS 134 | Computer Science I | 3 | |
| GE T/RS | T/RS 121 | Theology I | 3 | |
| GE PHIL | PHIL 120 | Introduction to Philosophy | | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE PHED | PHED ELECT | Physical Education Electives | ½ | ½ |
| | | | **18** | **18** |
| | | **THIRD YEAR** | | |
| MAJOR | CHEM 330 | Organic Chemistry III | 3½ | |
| MAJOR | CHEM 370 | Instrumental Analysis | | 5 |
| MAJOR | CHEM 360-361 | Biophysical Chemistry I-II | 4½ | 4½ |
| MAJOR | CHEM 390-391 | Chemistry Literature-Seminar | 1 | 1 |
| GE ELECT | COGNATE ELECT[1,2] | Cognate Electives (210 level or above) | 3 | |
| GE T/RS | T/RS 122 | Theology II | 3 | |
| GE PHIL | PHIL 210 | Ethics | | 3 |
| GE S/BH | S/BH ELECT | Social-Behavioral Electives | 3 | 3 |
| GE PHED | PHED ELECT | Physical Education Elective | | 1 |
| | | | **18** | **17½** |
| | | **FOURTH YEAR** | | |
| MAJOR | CHEM 450-451 | Biochemistry I-II | 3 | 3 |
| MAJOR | CHEM 450L | Biochemistry Lab | 1½ | |
| MAJOR | CHEM 493-494 | Undergraduate Research | 1½ | 1½ |
| GE T/RS or PHIL | T/RS or PHIL | Elective | 3 | |
| GE HUMN | HUMN ELECT | Humanities | 3 | 3 |
| GE ELECT | COGNATE ELECT[1,2] | Cognate Elective (210 level or above) | | 3 |
| GE ELECT | ELECT | Free Elective | | 3 |
| | | | **12** | **13½** |

**Total: 130 CREDITS**

[1] Cognate electives for the Biochemistry major may be taken in any of the following disciplines: Biology, Chemistry, Computer Science, Environmental Science, Mathematics, Physics and certain Psychology courses (Psyc 210, 231 and Psyc 384: Psychopharmacology)

[2] For ACS certification, Biochemistry majors must take MATH 114, 221, 222, 341; PHYS 140-141 in place of PHYS 120-121; and CHEM 440 and 440L.

## BIOCHEMISTRY PRE-PROFESSIONAL TRACK

| | Dept. and No. | Descriptive Title of Course | Credits FALL | SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| MAJOR (GE NSCI) | CHEM 112-113 | General Analytical Chem. I-II | 4½ | 4½ |
| COGNATE | BIOL 141-142 | General Biology I-II | 4½ | 4½ |
| COGNATE (GE QUAN) | MATH 103/114 | Pre-Calc, Analysis I | 4 | 4 |
| GE WRTG | WRTG 107 | Composition | 3 | |
| GE C/IL | C/IL 102 | Computing and Information Literacy | | 3 |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **17** | **17** |
| | | **SECOND YEAR** | | |
| MAJOR | CHEM 232-233 | Organic Chem I-II | 4½ | 4½ |
| COGNATE | PHYS 120-121 | General Physics I-II | 4 | 4 |
| GE SPCH | COMM 100 | Public Speaking | | 3 |
| GE T/RS | T/RS 121 | Theology I | 3 | |
| GE PHIL | PHIL 120 | Introduction to Philosophy | | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE S/BH | S/BH ELECT | Social/Behavioral Elective | 3 | |
| GE PHED | PHED ELECT | Physical Education Elective | ½ | ½ |
| | | | **18** | **18** |
| | | **THIRD YEAR** | | |
| MAJOR | CHEM 360 | Biophysical Chemistry | 4½ | |
| MAJOR | CHEM 370 | Instrumental Analysis | | 5 |
| MAJOR | CHEM 450-451 | Biochemistry I-II | 4½ | 3 |
| MAJOR | CHEM 390 | Chem Literature | 1 | |
| GE T/RS | T/RS 122 | Theology II | 3 | |
| GE PHIL | PHIL 210 | Ethics | | 3 |
| GE S/BH | S/BH ELECT | Social/Behavorial Elective | | 3 |
| GE ELECT | ELECT | Free Elective | 3 | |
| GE PHED | PHED ELECT | Physical Education Elective | | 1 |
| | | | **16** | **15** |
| | | **FOURTH YEAR** | | |
| MAJOR | CHEM ELECT | Adv. Topics-Biochemistry | | 3 |
| MAJOR/COGNATE | CHEM/BIO ELECT | Chem or Bio *Elective | 3-5 | |
| COGNATE ELECT | COGNATE ELECT | Biology Elective* | 3-5 | 3-5 |
| GE T/RS or PHIL | T/RS or PHIL | Elective | 3 | |
| GE HUMN | HUMN ELECT | Humanities Elective | 3 | 3 |
| GE ELECT | ELECT | Free Electives | 3 | 6 |
| | | | **15-17** | **15-17** |
| | | | **Total: 131-135 CREDITS** | |

Note: Senior year must contain at least 2 credits of laboratory or research.
*Advanced biology courses are those courses which the Biology Department designates in the cellular, molecular or genetics areas.

**MINOR:** The following requirements are needed for a minor in Biochemistry: Organic Chemistry (6 credits), Biochemistry (3 credits), Biophysical Chemistry (3 credits) and Chemistry laboratory (3 credits).

# CHEMISTRY-BUSINESS

The Chemistry-Business major combines theoretical and technical instruction in chemistry with management training in business. Graduates of this program will be concerned not only with chemical research and technological development but also with management problems in science-related industries.

Most Chemistry majors tend to be research-oriented although almost half of the approximately 100,000 chemists employed in American private industry are engaged in work other than research and development: management, marketing and sales. This combined degree was formulated to prepare chemists to assume these latter responsibilities.

From the point of view of the business student, almost one-third of all business graduates can expect to be employed in a chemistry-related field: pharmaceuticals, plastics, petroleum, etc. Most Business majors employed in such industries must develop, often on their own, the technical knowledge needed to understand their company's operations and products. A fundamental background in chemistry as provided in this concentration is a distinct advantage to individuals planning such careers.

**CHEMISTRY-BUSINESS**

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **SPRING** |
| MAJOR (GE NSCI) | CHEM 112-113 | General Analytical Chem. I-II | 4½ | 4½ |
| COGNATE (GE QUAN) | MATH 103-114 or 114-221 | Pre-Calc.-Analysis I or Analysis I-Analysis II | 4 | 4 |
| COGNATE (GE S/BH) | ECO 153-154 | Prin. of Micro. & Macro. Econ. | 3 | 3 |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | | 3 |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| | | | **15½** | **17½** |
| | | **SECOND YEAR** | | |
| MAJOR | CHEM 232-233 | Organic Chemistry I-II | 4½ | 4½ |
| MAJOR | ACC 253-254 | Financial-Managerial Acctg. | 3 | 3 |
| GE ELECT | ELECT | Free Elective | | 3 |
| GE T/RS | T/RS 121-122 | Theology I & II | 3 | 3 |
| GE PHIL | PHIL 120 | Introduction to Philosophy | 3 | |
| GE HUMN | FOR LANG[1] | Elective | 3 | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **17½** | **17½** |
| | | **THIRD YEAR** | | |
| MAJOR | CHEM 320-391 | Industrial Chem. I-Chem. Seminar | 3 | 1 |
| MAJOR | MGT 351-352 | Principles of Management I-II | 3 | 3 |
| MAJOR | MKT 351 | Intro. to Marketing | 3 | |
| MAJOR | FIN 351 | Intro. to Finance | | 3 |
| COGNATE | CMPS 330 | Information Systems | 3 | |
| COGNATE | MATH 204 | Special Topics in Statistics | | 3 |
| GE ELECT | CHEM ELEC | Chem. (210 level or above) | | 3 |
| GE PHIL-T/RS or PHIL | PHIL 210-ELECT | Ethics-Elective | 3 | 3 |
| GE PHED | PHED ELECT | Physical Education Elective | 1 | |
| | | | **16** | **16** |
| | | **FOURTH YEAR** | | |
| MAJOR | OIM 351-OIM 352 | Intro. to Mgt Science-Op Mgt | 3 | 3 |
| MAJOR | MGT 251 | Legal Environment of Business | 3 | |
| COGNATE | PHYS 120-121 | General Physics | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE ELECT | ELECT | Electives | 3 | 6 |
| | | | **15** | **15** |
| | | | **Total: 130 CREDITS** | |

[1]The Department recommends foreign language.

# CHEMISTRY-COMPUTERS

The program Chemistry-Computers is designed to provide a vehicle for preparing students in the area of intensive computer use in the field of chemistry. The use of computers has long been important in chemistry, but in recent years areas such as molecular modeling and design have become increasingly important. Drug companies use these techniques for the design of drugs for particular medical problems. In addition, most of the modern analytical instruments are highly enhanced by on-line computer processing of data. This program is designed to enable students to enter industry or graduate programs in areas such as computational chemistry, chemical information retrieval, or molecular design.

**CHEMISTRY-COMPUTERS**

| | Dept. and No. | Descriptive Title of Course | Credits FALL | SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| MAJOR (GE NSCI) | CHEM 112-113 | General Analytical Chem. I-II | 4½ | 4½ |
| MAJOR | CMPS 134-144 | Computer Science I-II | 3 | 4 |
| COGNATE (GE QUAN) | MATH 142-114 | Discrete Structures-Analysis I | 4 | 4 |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | 3 | |
| GE T/RS | T/RS 121 | Theology I | | 3 |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| | | | **18½** | **18½** |
| | | **SECOND YEAR** | | |
| MAJOR | CHEM 232-233 | Organic Chemistry I-II | 4½ | 4½ |
| MAJOR | CMPS 240-250 | Data Struct.-Mach. Org. | 3 | 3 |
| COGNATE | MATH 221-222 | Analysis II-III | 4 | 4 |
| COGNATE | PHYS 140-141 | Elements of Physics | 4 | 4 |
| GE T/RS-PHIL | T/RS 122-PHIL 120 | Theology II-Introduction to Philosophy | 3 | 3 |
| | | | **18½** | **18½** |
| | | **THIRD YEAR** | | |
| MAJOR | CHEM 370 | Instrumental Analysis | | 5 |
| MAJOR | CHEM 362-363 | Physical Chemistry I-II | 3 | 3 |
| MAJOR | CHEM 390-391 | Chemistry Literature-Seminar | 1 | 1 |
| MAJOR | CMPS 352 | Operating Systems | 3 | |
| COGNATE | MATH 341 | Differential Equations | | 4 |
| GE PHIL | PHIL 210 | Ethics | 3 | |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE S/BH | S/BH ELECT | Social Behavioral Elective | 3 | |
| PHED | PHED ELECT | Physical Education Electives | 1 | 1 |
| | | | **17** | **17** |
| | | **FOURTH YEAR** | | |
| MAJOR | CHEM 493-494 | Undergraduate Research | 1½ | 1½ |
| GE ELECT | CHEM or CMPS ELECT | Chem. Cmps. Elec.-300 Level or above | 3 | 3 |
| GE T/RS or PHIL | TR/S or PHIL | Elective | 3 | |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE S/BH | S/BH ELECT | Social Behavioral Elective | | 3 |
| GE ELECT | ELECT | Free Electives | 3 | 3 |
| GE PHED | PHED ELECT | Physical Education Elective | 1 | |
| | | | **14½** | **13½** |

**Total: 136 CREDITS**

# B.S. IN MEDICAL TECHNOLOGY

The Bachelor of Science in Medical Technology degree program, under the direction of Dr. Michael Cann, is designed to train and qualify students as medical technologists or clinical laboratory scientists serving hospitals, clinical laboratories, industrial or research institutions. The program meets and exceeds the requirements of the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). The program involves the satisfactory completion of the first three years of a curriculum of study (indicated below) at the University of Scranton and the fourth year of clinical education at a hospital having a School of Medical Technology approved by NAACLS. After completing the program, students take a national certification examination. To date the University has arranged affiliation with hospitals in the cities of Abington, Williamsport and Wilkes-Barre. See affiliations at the end of this Bulletin.

The curriculum for the BSMT closely parallels the B.S. in Biochemistry program so that students have the option to change to the latter after two years, should their career goals change.

| | Dept. and No. | Descriptive Title of Course | Credits FALL | SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| MAJOR (GE NSCI) | CHEM 112-113 | Gen. Analytical Chem. I-II | 4½ | 4½ |
| COGNATE (GE QUAN) | MATH 103-114 | Pre-Calculus, Analysis I | 4 | 4 |
| GE ELECT | BIOL 141-142 | General Biology I-II | 4½ | 4½ |
| GE SPCH | COMM 100 | Public Speaking | | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | 3 | |
| GE FSEM-PHED | INTD 100-PHED | Freshman Seminar-PHED | 1 | 1 |
| | | | **17** | **17** |
| | | **SECOND YEAR** | | |
| MAJOR | CHEM 232-233 | Organic Chem. I-II | 4½ | 4½ |
| GE ELECT | BIOL 250-245 | Microbiology-Physiology | 5 | 4½ |
| GE T/RS | T/RS 121-122 | Theology I-II | 3 | 3 |
| GE PHIL | PHIL 120 | Introduction to Philosophy | 3 | |
| GE WRTG | WRTG 107 | Composition | 3 | |
| GE S/BH | S/BH ELECT | Social-Behavioral Elective | | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | | 3 |
| | | | **18½** | **18** |
| | | **THIRD YEAR** | | |
| MAJOR | CHEM 350 | Intro. to Biochemistry | 3 | |
| MAJOR | CHEM 370 | Instrumental Analysis | | 5 |
| COGNATE | BIOL 344 | Immunology | | 3 |
| GE PHIL-PHIL or T/RS | PHIL 210-PHIL or T/RS | Ethics-Elective | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 6 | 3 |
| GE S/BH | SOC/BH ELECT | Social-Behavioral Elective | 3 | |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **16** | **15** |
| | | **FOURTH YEAR** | | |
| MAJOR | | Clinical Education | | |
| MAJOR | | Clinical Microbiology | | |
| MAJOR | | Clinical Chemistry | | |
| MAJOR | | Clinical Hematology/Coagulation | | |
| MAJOR | | Clinical Immunohematology | | |
| MAJOR | | Clinical Immunology/Serology | | |
| MAJOR | | Clinical Seminar | | |
| | | | **16** | **16** |
| | | | **Total: 133 ½ CREDITS** | |

Note: There is a $125 Clinical Year Fee charged for each semester of senior year to cover University administrative cost. The student is not, however, charged University tuition for the credits earned in senior year. Some hospitals may charge their own fees. The department has an outstanding record in having its students accepted into medical-technology programs. It should be clear, however, that admission to clinical education is competitive and dependent on the student's academic record and success in the interview. The hospital is responsible for selection. A delay in beginning the clinical education may delay a student's graduation. Credits for senior-year courses vary from 28 to 32, depending on the hospital. Course titles in that year may also vary.

**In cases where a student withdraws from a chemistry lecture course, the student must also withdraw from the corresponding laboratory course unless a written waiver is provided by the department.**

**C/CJ 200** Dr. Vinson
**Forensic Science** 3 credits
Designed for law-enforcement majors as well as science majors, this is a study of the rules of evidence and the position of the expert scientific witness in law, followed by a review of the uses of scientific, and particularly chemical, evidence in various phases of the investigation and trial of criminal actions.

**CHEM 100** Staff
**(E)Elements of Chemistry** 3 credits
An elementary study of the field of chemistry for the non-science major; concepts of structure, states of matter, modern developments, implications of the field for modern society. 3-hour lecture.

**CHEM 104** Staff
**(E)Science and Society** 3 credits
A study of some current problems of a scientific and technological nature from the point of view of the non-science major. Scientific background will be provided to lead to greater understanding and possible solutions. Possible topics: energy, genetic engineering, narcotics, pesticides, etc. 3-hour lecture.

**CHEM 110-111** Staff
**(E)Introductory Chemistry** 6 credits
A study of the fundamental concepts of general chemistry, organic chemistry, and biochemistry. Laboratory work emphasizes skills and procedures relevant to the living system. 3-hour lecture each semester.

**CHEM 110L-111L** Staff
**Introductory Chemistry Laboratory** 2 credits
(Lecture is required as pre- or co-requisite; CHEM 110L is prerequisite for CHEM 111L) Experiments dealing with principles of general, organic and biological chemistry are performed. 2 hours laboratory each semester.

**CHEM 112-113** Staff
**(E)General and Analytical Chemistry** 6 credits
A study of the laws, theories and principles of general chemistry together with qualitative and quantitative analysis. 3-hour lecture each semester.

**CHEM 112L-113L** Staff
**General and Analytical Chemistry Laboratory** 3 credits
(Lecture is required as pre- or co-requisite; CHEM 112L is prerequisite for CHEM 113L) Experiments involve semi-micro techniques for qualitative and quantitative analysis (gravimetric and volumetric analysis). 3-hour laboratory each semester.

**CHEM 114** Staff
**General Analytical Chemistry Laboratory** 2 credits
A special laboratory course for those students who are advanced in chemistry. The laboratory work covers semi-micro techniques of gravimetric and volumetric quantitative analysis. Admission will be on the basis of a placement exam and the professor's permission. 4 hours laboratory. Note: For students with majors in the Chemistry and Biology departments, this course will satisfy the requirements for the CHEM 112 - 113 laboratory courses.

**CHEM 202** Dr. Dickneider
**Global Change** 3 credits
An application of earth system science to the problems of global environmental change. This course examines the record of past changes in climate, land mass distribution, and atmospheric and oceanic composition through an evaluation of the causes of rapid formations, fossils, and tree ring data. The potential for future change and human impact on the environment, including global warming, are discussed in terms of the earth's paleoclimatological record.

**CHEM 232-233** Staff
**(E)Organic Chemistry** 6 credits
(Prerequisites: CHEM 112-113) An introduction to the chemistry of the principal aliphatic and aromatic compounds of carbon and their derivatives. 3-hour lecture each semester.

**CHEM 232L-233L** Staff
**Organic Chemistry Laboratory** 3 credits
(Lecture is required as pre- or co-requisite; CHEM 232L is prerequisite for CHEM 233L) Investigation of the chemical preparations and syntheses of major organic functional groups. 3-hour laboratory each semester.

**CHEM 240** Dr. Marx
**Inorganic Chemistry** 3 credits
(Prerequisite: CHEM 113) Descriptive chemistry of main group and selected transition elements and their compounds correlated with the periodic table, physical properties, atomic and molecular structure.

**CHEM 320** Dr. Dickneider
**Industrial Chemistry** 3 credits
A review of chemical operations and unit or batch processes common to industry. Econometric analysis involving supply-demand, productivity, commodity prices and costing is an important area covered, as are measures of productivity and patent activity. 3-hour lecture.

**CHEM 330** Drs. Cann, Dickneider
**Organic Chemistry III** 2 credits
(Prerequisites: CHEM 232-233) A continuation of Chemistry 232-233, emphasizing the study of the major types of organic mechanisms. 2 hours lecture.

**CHEM 330L** Staff
**Organic Chemistry III** 1.5 - 3 credits
(Lecture is required as pre- or co-requisite) Experiments involve advanced techniques in synthesis and characterization of organic compounds. 6 hours laboratory for Chemistry majors and 3-hour laboratory for Biochemistry majors.

**CHEM 340** Dr. Cann
**Environmental Chemistry** 3 credits
(Prerequisite: CHEM 232-233) A study of chemicals in the environment including their origin, transport, reactions, and toxicity in soil, water, air and living systems.

**CHEM 342** Staff
**Environmental Toxicology** 3 credits
(Prerequisites: CHEM 232-233, BIOL 141-142) This course will encompass several realms of environmental toxicology, including general toxicological theory, effects of contaminants on various biological systems, and discussion of environmental toxicological issues (i.e., specific case studies as well as the types of analyses used in these types of studies).

**CHEM 344** Dr. Dickneider
**Environmental Geochemistry** 3 credits
(Prerequisite: CHEM 232-233) A consideration of the natural cycles (carbon, sulfur, oxygen, water, etc.) that govern the chemistry of our planet. Also considered will be the origins of the elements and the origin, paleohistory, and composition of the planet itself. The effect of man's activities in natural-resource use, ozone depletion, greenhouse-gas production, and fossil-fuel production and use will be examined in detail, with particular attention to their effects on the state of the oceans and the atmosphere.

**CHEM 350** Dr. Wasilewski
**General Biochemistry I** 3 credits
(Prerequisite: CHEM 233) An introduction to the study of biochemistry. A study of the chemical nature of lipids, carbohydrates, proteins, nucleic acids and enzymes, including relationships among vitamins, hormones, and inorganic compounds. 3-hour lecture. Successful completion of CHEM 350 precludes credit for CHEM 450.

**CHEM 351** Dr. Wasilewski
**General Biochemistry II** 3 credits
(Prerequisite: CHEM 350) An introduction to the study of the metabolism of carbohydrates, lipids, amino acids, and proteins, including energy transformations and the role of enzyme systems in the above processes. 3-hour lecture. Successful completion of CHEM 351 precludes credit for CHEM 451.

**CHEM 352** Dr. Foley
**Chemical Toxicology** 3 credits
(Prerequisite: CHEM 233) The nature, mode of action and methods of counteracting substances which have an adverse effect on biological systems, especially human. Medical, industrial and environmental forensic aspects will be discussed. 3-hour lecture.

**CHEM 360** Drs. Baumann, Hart
**Biophysical Chemistry I** 3 credits
(Prerequisites: CHEM 232-233) An introduction to the application of physical-chemical principles to biological problems. This involves aqueous solutions, colloidal chemistry, thermodynamics, electro-chemistry, chemical kinetics and nuclear chemistry. 3-hour lecture.

**CHEM 361** Drs. Baumann, Hart
**Biophysical Chemistry II** 3 Credits
(Prerequisite CHEM 360) A continuation of Biophysical Chemistry I involving a study of atomic and molecular structure, spectroscopy, photo-chemistry, and surface chemistry with applications to biological and biochemical phenomena. 3-hour lecture.

**CHEM 360L-361L** Staff
**Biophysical Chemistry Laboratory** 3 Credits
(Lecture is required as pre- or co-requisite; CHEM 360L is prerequisite for CHEM 361L) Experiments involve applications of physical-chemical techniques to biological problems. 3-hour laboratory each semester.

**CHEM 362-363** Drs. Baumann, Hart
**Physical Chemistry I - II** 6 credits
(Prerequisites: CHEM 113, MATH 222) A study of the physical-chemical properties of matter and the dynamics of chemical reactions. 3-hour lecture each semester.

**CHEM 362L-363L** Staff
**(W)Physical Chemistry Laboratory** 3 credits
(Lecture is pre- or co-requisite; CHEM 362L is prerequisite for CHEM 363L) Experiments demonstrate physical-chemical properties of matter and reactions. 3-hour laboratory each semester.

**CHEM 370** Dr. Vinson
**Instrumental Analysis** 2 credits
(Prerequisite: CHEM 360 or 362) Instrumental methods of analysis consisting of theory and application of such instrumental techniques as spectroscopy, polarography, and instrumental titrimetry. 2-hour lecture.

**CHEM 370L** Staff
**Instrumental Analysis Laboratory** 3 credits
(Lecture is required as pre- or co-requisite) Experiments involve application of modern chemical instrumentation and techniques to quantitative analysis. 6 hours laboratory.

**CHEM 384** Staff
**Special Topics in Chemistry** 2-4 credits
Study of selected topics in chemistry and biochemistry, depending on student and faculty interest and the current state of the science. It may include topics from inorganic chemistry, organic chemistry, physical chemistry, analytical chemistry, polymer chemistry and interdisciplinary topics.

**CHEM 390** Dr. Cann
**Chemical Literature and Writing** 1 credit
A study of the published source material of chemical science and industry. The course includes practical instruction in library technique and in the written reporting of results. 1 hour lecture.

**CHEM 391** Staff
**Seminar** 1 credit
Current topics in chemistry, biochemistry, and industrial chemistry are prepared and presented by the students.

**CHEM 440** Dr. Marx
**Advanced Inorganic Chemistry** 3 credits
(Prerequisites: CHEM 362-363 or 360-361) Theoretical concepts and their application to the reactions and structure of inorganic compounds. Coordination chemistry and related topics, physical methods and reaction mechanisms. 3-hour lecture.

**CHEM 440L** Staff
**Advanced Inorganic Chemistry Laboratory** 3 credits
(Lecture is required as pre- or co-requisite) Laboratory methods involving synthesis and characterization of inorganic compounds are developed. 3-hour laboratory.

**CHEM 450** Dr. Foley
**(W)Biochemistry I** 3 credits
(Pre- or co-requisites: CHEM 233 and 360 or 362) Structure-function relationships with emphasis on the organic and biophysical characteristics of proteins, lipids and carbohydrates are described. Enzyme mechanisms and kinetics and the thermodynamic basis of intermediary metabolism are major themes. 3-hour lecture. CHEM 450L Lab is required of Biochemistry majors. Successful completion of CHEM 450 precludes credit for CHEM 350.

**CHEM 450L** Staff
**(W)Biochemistry Laboratory** 3 credits
(Lecture is required as pre- or co-requisite) Experiments involve techniques used in characterization of biopolymers and study of enzyme kinetics.

**CHEM 451** Dr. Foley
**Biochemistry II** 3 credits
(Prerequisite: CHEM 450) The discussion of intermediary metabolism is continued from CHEM 450 with emphasis on lipid protein and nucleic acid metabolism. Chemical aspects of molecular biology, including DNA replication, gene regulation and protein biosynthesis are included. 3-hour lecture. Successful completion of CHEM 451 precludes credit for CHEM 351.

**CHEM 452** Dr. Wasilewski
**Enzymology** 3 credits
A course in the chemical nature of enzymes with relation to mechanism of enzyme action and kinetics, purification and identification of enzymes and isoenzymes, biochemical and physiological aspects of enzymes in living systems. 3-hour lecture.

**CHEM 460** Drs. Baumann, Hart
**Physical Chemistry III** 3 credits
(Prerequisite: CHEM 363) Quantum mechanics and quantum chemistry, including classical problems, perturbational theory, variational theory and specific applications of molecular orbital theory to organic molecules and spectroscopic applications.

**CHEM 464** Drs. Hart, Narsavage
**Polymer Chemistry** 3 credits
(Co-requisites: CHEM 330; CHEM 361 or 363) Survey of preparative methods for polymers; characterization of polymers using physico-chemical methods, spectroscopy, and thermal analysis; structure-property relationships; and applications of polymers. 3-hour lecture.

**CHEM 464L** Drs. Hart, Narsavage
**Polymer Chemistry Laboratory** 1.5 credits
(Pre - or Co-requisite: CHEM 330; CHEM 464) Laboratory experiments investigate synthesis and characterization methods for polymers, structure-property effects, and thermal analysis of polymers. 3-hour laboratory.

**CHEM 493-494** Staff
**(W)Undergraduate Research** 3 credits
(Prerequisite: CHEM 233, 360 or 362, 390) Individual study and research in connection with a specific chemistry or biochemistry problem. Results must be written as a thesis and defended before the department. 1.5 credits each semester.

**NSCI 103** Dr. Vinson
**(A,W)The Ascent of Man** 3 credits
Science and technology from the ancient Greeks to the present will be discussed from the personal viewpoint of the scientists and inventors. Lectures will be supplemented by films, demonstrations, and field trips. 3-hour lecture.

# COMMUNICATION

*DR. ROBERT P. SADOWSKI, Chairperson*

The Department of Communication embraces the fields of broadcasting (radio and television), cable, film, journalism, advertising, public relations, and speech. Although the media are interrelated, students may concentrate in one of these fields. Some students, however, will seek a mixture or subspecialty which combines study in several Communication areas. The department will adapt each student's curriculum to his or her goals, and for this reason individual student advising by the Communication faculty is a high priority.

Students who major in Communication become knowledgeable about the subject matter from both humanistic and scientific perspectives. They also have several opportunities to acquire on-the-job experiences through departmental internships, as well as individualized study available through faculty-directed projects and theses. A Communication degree program prepares students for professional careers and advanced studies. In addition, courses are designed to serve students in other departments of the University by developing their oral and written communication skills.

A student wishing to earn a B.A. degree in Communication must satisfactorily complete a minimum of 36 semester hours from the Department of Communication course offerings. Included among these 36 hours are six core courses which are required for all Communication majors.

## DEGREE OFFERINGS AND REQUIREMENTS

A minimum of 36 hours in Communication subjects, including the following six required core courses:

| | |
|---|---|
| COMM 110 | Interpersonal Communication |
| COMM 120 | Mass Communication |
| COMM 210 | Logical and Rhetorical Analysis |
| COMM 220 | Responsibility in Communication |
| COMM 310 | Mass Communication Law |
| COMM 410 | Communication Theory and Research |

**MINOR.** A student wishing to minor in Communication must satisfactorily complete 18 hours to be selected with the approval of the department chair. Nine of these hours must come from the following three options:

| | | | |
|---|---|---|---|
| 1) | either | COMM 110 | Interpersonal Communication |
| | or | COMM 120 | Mass Communication |
| 2) | either | COMM 210 | Logical and Rhetorical Analysis |
| | or | COMM 220 | Responsibility in Communication |
| 3) | either | COMM 310 | Mass Communication Law |
| | or | COMM 410 | Communication Theory and Research. |

(COMM 100 and COMM 484 do not count toward the minor.)
Major electives may be selected from the following courses without necessarily concentrating in one area:

*Advertising/Public Relations*

COMM 225 Advertising
COMM 226 Writing for Public Relations
COMM 227 Public Relations
COMM 312 Organizational Communication
COMM 325 Advertising Copywriting
COMM 327 Public Relations Cases
COMM 380 Advertising Practicum

*Broadcasting/Film*

COMM 232 Film History
COMM 331 Mass Media Management
COMM 332 Documentary Film
COMM 334 Broadcast Programming
COMM 425 Cable Television
COMM 426 International Broadcasting
COMM 427 International Film
COMM 432 Film Theory and Criticism
COMM 433 Television Criticism

*Communication Studies*

COMM 211 Argumentation and Debate
COMM 214 Small-Group Communication
COMM 228 Intercultural Communication
COMM 229 Gender and Communication
COMM 311 Political Communication
COMM 313 Nonverbal Communication
COMM 326 Political Advertising
COMM 411 Persuasion and Propaganda
COMM 416 Philosophy of Communication

*Journalism*

COMM 223 Radio Journalism
COMM 224 Newswriting
COMM 323 Television Journalism
COMM 324 Advanced Newswriting
COMM 328 News Editing
COMM 329 Graphics

*Radio/TV Production*

COMM 221 Radio Production
COMM 222 Television Production
COMM 321 Advanced Radio Production
COMM 322 Advanced Television Production
COMM 422 Educational Television
COMM 480 Television Practicum

# COMMUNICATION

| | Dept. and No. | Descriptive Course Title | Credits FALL | SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| MAJOR | COMM 110-120 | Interpersonal/Mass Communication | 3 | 3 |
| COGNATE | COGNATE ELECT | Cognate Elective | | 3 |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | 3 | |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE PHIL-T/RS | PHIL 120-T/RS 121 | Introduction to Philosophy/Theology I | 3 | 3 |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **16** | **16** |
| | | **SECOND YEAR** | | |
| MAJOR | COMM 210 | Logical and Rhetorical Analysis | 3 | |
| MAJOR | COMM 220 | Responsibility in Communication | | 3 |
| MAJOR | COMM ELECT | Communication Electives | 3 | 3 |
| COGNATE | COGNATE ELECT | Cognate Electives | 3 | 3 |
| GE PHIL-T/RS | PHIL 210-T/RS 122 | Ethics/Theology II | 3 | 3 |
| GE QUAN-S/BH | QUANT-S/BH ELECT | Quantitative-S/BH Science | 3 | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **16** | **16** |
| | | **THIRD YEAR** | | |
| MAJOR | COMM 310/ELECT | Mass Communication Law/Comm. Elective | 3 | 3 |
| MAJOR | COMM ELECT | Communication Electives | 3 | 3 |
| COGNATE | COGNATE ELECT | Cognate Electives | 3 | 3 |
| GE PHIL or T/RS-HUMN | ELECT | Phil.-T/RS/Humanities Electives | 3 | 3 |
| GE NSCI | NSCI ELECT | Natural Science Electives | 3 | 3 |
| GE ELECT | ELECT | Electives | 3 | 3 |
| | | | **18** | **18** |
| | | **FOURTH YEAR** | | |
| MAJOR | COMM 410 | Comm. Theory and Research | 3 | |
| MAJOR | MAJOR ELECT | Communication Elective | | 3 |
| COGNATE | COGNATE ELECT | Cognate Electives | 3 | 6 |
| GE HUMN-S/BH | HUMN-S/BH ELECT | Humanities-S/BH Electives | 3 | 3 |
| GE ELECT | ELECT | Electives | 6 | 3 |
| | | | **15** | **15** |

**Total: 130 CREDITS**

**COMM 100** Staff
**Public Speaking** 3 credits
This is a performance class which emphasizes the theory, composition, delivery, and criticism of speeches. Successful completion of COMM 100 (with a grade of C or better) fulfills the speech skills requirement of the University.

**COMM 110** Staff
**Interpersonal Communication** 3 credits
An investigation and analysis of the process and nature of human communication and its intrapersonal and interpersonal attributes.

**COMM 120** Staff
**Mass Communication** 3 credits
Historical survey of the nature, scope, and function of the print and electronic media in the United States. Economics, programming, and public control are some of the topics covered.

**COMM 210** Staff
**(W)Logical and** 3 credits
**Rhetorical Analysis**
A study of the principles of logic and persuasion, analysis of fallacies, and critical examination of the principles of structure in written and oral communication. Practice in briefs and abstracts with an emphasis on precision and clarity.

**COMM 211** Staff
**Argumentation and Debate** 3 credits
This course concentrates on the techniques of argumentation, persuasion, debate, and forensics. Focuses heavily on research, case construction, and formal analysis.

**COMM 214** Staff
**Small Group Communication** 3 credits
An examination of research, techniques, and principles of small group communication. Topics include problem-solving, decision-making, conflict-resolution, leadership theories, interaction strategies, and participant roles.

**COMM 220** Staff
**Responsibility in Communication** 3 credits
(Prerequisites: COMM 110 and COMM 120) This course will consider the responsibilities of those in control of the mass media and the publics which are served. Different faculty may approach this course from various ethical-humanistic perspectives.

**COMM 221** Staff
**Radio Production** 3 credits
An examination of the dynamic industry roles of the radio producer/director. Areas to be studied include production theory and techniques which apply to station and program promotions, advertising, news, and music formats.

**COMM 222** Staff
**Television Production** 3 credits
Designed to provide both theoretical background and practical application of television production in and outside the studio. Various format types, production techniques, and artistic styles are studied. Opportunity for producing and directing television programs.

**COMM 223** Staff
**Radio Journalism** 3 credits
(Prerequisite: COMM 221 or COMM 224 or COMM 328) With a focus on gathering and preparing news for broadcast (concentrating especially on interviewing techniques), this class will investigate various news formats and styles. At the mid-semester point, the class will begin operating as a news team.

**COMM 224** Staff
**Newswriting** 3 credits
Evaluating news, reporting, and writing stories. Newsroom organization. Style and usage. Interviewing, feature writing. Students work at Macintosh computer terminals. Typing ability needed.

**COMM 225** Staff
**Advertising** 3 credits
This course explores advertising as an institution in society, utilizing research, media planning, and creative strategies. Students will participate in the formulation of an advertising campaign plan for local businesses.

**COMM 226** Staff
**Writing for Public Relations** 3 credits
The study of the kinds of written communication used in the practice of public relations. This writing course examines both print and broadcast media. Students work at terminals for written assignments.

**COMM 227** Staff
**Public Relations** 3 credits
This course introduces the principles, practices, and theory of public relations as communication management. Strategies that create public images for organizations and sustain cooperative relationships with their various publics will be examined.

**COMM 228** Staff
**(D)Intercultural Communication** 3 credits
Designed to provide a framework for understanding diversity in communication patterns among cultures and co-cultures. Topics include high-and low-context patterns, verbal and nonverbal communication across cultures and co-cultures, persuasion, dialects, organization of verbal codes, and the structure of conversations.

**COMM 229** Staff
**(D)Gender and Communication** 3 credits
This course examines the theory and research in communication that deals with gender differences and gender stereotyping. Experiential learning techniques give students the opportunity to examine how issues of gender communication impact their lives. Areas to be addressed include: language usage; nonverbal communication; mass-media effects; organizational communication; interpersonal communication and intimacy.

**COMM 232** Staff
**Film History** 3 credits
This course will trace the evolution of filmmaking from its earliest experimental stages to the modern feature film of today. The course will concentrate on the American film industry, its audience impact as a mass medium, and the genres of films which have evolved over the years. Selected screenings will reveal the transitions and refinements which characterize the medium of film.

**COMM 310** Staff
**Mass Communication Law** 3 credits
(Prerequisites: COMM 110, 120, 210 & 220; juniors and seniors only) Analysis and examination of statutory laws, congressional legislation, and federal rules and regulations governing the mass media in the United States. Focus on the First Amendment, libel and slander, privacy, copyright, free press/fair trial, obscenity, advertising, antitrust and monopoly, taxation, and licensing.

**COMM 311** Staff
**Political Communication** 3 credits
The study of rhetorical strategies used by the modern politician. Examination of American political rhetoric as well as rhetorical styles operative in foreign-policy activities.

**COMM 312** Staff
**Organizational Communication** 3 credits
The study of communication behaviors, patterns, and strategies in organizations. Topics include power and politics, organizational cultures, human resources, conflict management, and negotiation. Historical and contemporary theories of organizing are examined and critiqued from a communication perspective.

**COMM 313** Staff
**Nonverbal Communication** 3 credits
A study of the nonverbal aspects of human interaction. Topics include impression management, social influence, form and function in design, proxemics, kinesics, and the symbolic environment.

**COMM 314** Staff
**Legal Communication** 3 credits
An examination of specific skills needed to promote effective and meaningful communication by the legal professional and the interface with clients, juries, judges, and the non-legal public.

**COMM 315** Staff
**Multi-Media Presentations** 3 credits
(Prerequisite: COMM 100) Advanced principles and practices of speech construction, audience analysis, criticism and delivery styles.

**COMM 321** Staff
**Advanced Radio Production** 3 credits
(Prerequisite: COMM 221) Building upon the foundation acquired in COMM 221, students generate specialized projects of their own design. Then, working with the instructor and professionals from the radio industry, students produce and direct complete programs for broadcast.

**COMM 322** Staff
**Advanced Television Production** 3 credits
(Prerequisite: COMM 222) Building upon the foundation acquired in COMM. 222, students pursue specialized projects in producing and directing programs for broadcast or cable distribution.

**COMM 323** Staff
**Television Journalism** 3 credits
(Prerequisite: COMM 224 or COMM 328) Broadcast-journalism skills are refined through classroom and outside assignments. Production techniques, including tape editing, are explored. Television news formats are produced.

**COMM 324** Staff
**Advanced Newswriting** 3 credits
(Prerequisite: COMM 224) Intensive training and practice in techniques of reporting and writing news stories and in covering public affairs. Familiarity with journalistic basics, style, and computer terminal operations required.

**COMM 325** Staff
**Advertising Copywriting** 3 credits
Students develop two separate creative campaign strategies for hypothetical clients of their own choosing. For these large-budget accounts, students must create copy for newspapers, magazines, broadcast, and direct mail, all with a consistent campaign theme.

**COMM 326** Staff
**Political Advertising** 3 credits
Critical examination of rhetorical strategies used in twentieth-century political campaigning. Case studies and student projects focus on the special uses of broadcast and print media in political advertising.

**COMM 327** Staff
**Public-Relations Cases** 3 credits
(Prerequisite: COMM 227) This course places the student in a managerial, decision-making role in planning and executing public-relations programs. A case-method approach is the predominant mode of instruction. Final project requires the development of a public-communication campaign.

**COMM 328** Staff
**News Editing** 3 credits
(Prerequisite: COMM 224) Preparing copy for publication. Correcting, improving and trimming stories. Headline writing, layout, graphics. Wire services, printing process.

**COMM 329** Staff
**Graphics** 3 credits
Visual aspects of print media. Typography, printing presses, handling photos and other art layout and design, introduction to desktop publishing. Familiarity with journalism basics, style, and computer-terminal operations required.

**COMM 331** Staff
**Mass-Media Management** 3 credits
(Prerequisite: COMM 120 or COMM 220) The multi-faceted roles of managers in the various communication industries are examined. Special attention is given to technical, conceptual and humanistic concerns. Specific areas of study include management of self and personal relations, unions and contracts, community relations, audience analysis and measurement.

**COMM 332** Staff
**Documentary Film** 3 credits
This course traces the growth, development, and influence of American and foreign nonfiction films, particularly their various functions as propaganda, public service and promotion, education, entertainment, and art.

**COMM 334** Staff
**Broadcast Programming** 3 credits
Study of programming strategies, practices, and operations of commercial radio and television stations. Topics include audience research, program acquisitions, scheduling, formats, syndication, promotion, and network-affiliate relationships.

**COMM 380** Staff
**Advertising Practicum** 3 credits
(Prerequisite: COMM 225 or COMM 325) Students function as a full-service advertising agency which provides clients with a complete array of services ranging from campaign creation to implementation and evaluation.

**COMM 410** Staff
**Communication Theory and Research** 3 credits
(Prerequisites: COMM 110, 120, 210, and 220; Seniors only; offered only in Fall semester) Critical study and analysis of various theoretical models of communication, behavioral-science theories, and communication-research paradigms. Topics include information theory, scientific method, balance and congruity theories, cognitive dissonance, perception, attitude change, semantic differential, group dynamics, persuasion, and statistical methods.

**COMM 411** Staff
**Persuasion and Propaganda** 3 credits
An in-depth examination of the theoretical foundations and practical applications of those factors which influence the persuasibility of target audiences. Topics include attitudes, beliefs, values, behaviors, appeals and reference groups.

**COMM 416** Staff
**Philosophy of Communication** 3 credits
A general study of the forces and dynamics which articulate the phenomenon of human communication by an examination of the human capacity to comprehend and realize fulfillment or wholeness through communication.

**COMM 422** Staff
**Educational Television** 3 credits
Instructional uses of the television medium by public television stations, schools, closed-circuit and cable systems. Types of educational programs are evaluated. Students work on preparing projects which may reflect their own pedagogical interests.

**COMM 425** Staff
**Cable Television** 3 credits
A study of cable television and its development and current place in the telecommunications industry. Topics include programming strategies, formats, multiple system operators, independents, syndication, sales, satellite services, pay-per-view, audience ratings, management and the franchising process. Students develop their own research proposals for establishing new cable channels, networks and services.

**COMM 426** Staff
**International Broadcasting** 3 credits
Comparative analysis of national and international media systems throughout the world. Emphasis on their origin, development, and operation.

**COMM 427** Staff
**International Film** 3 credits
An investigation of the major contributions and movements of various nations in the development and evolution of film as a multi-national and global industry.

**COMM 432** Staff
**Film Theory and Criticism** 3 credits
Critical examination of the major theoretical and analytical explanations of film's effectiveness as an artistic form of communication. The work of classical, contemporary and experimental film scholars will be studied, and selected films depicting their observations will be screened. Film analysis and criticism projects will be designed by students.

**COMM 433** Staff
**Television Criticism** 3 credits
Analysis of radio and television programs and promotional strategies, including formats, scripts, talent, commercials, public service announcements, positioning, ratings, and network-affiliate relationships.

**COMM 480** Staff
**Television Practicum** 3 credits
(Prerequisites: COMM 222 and COMM 322) Communication Seniors undertake significant areas of study resulting in a broadcast-quality videotape or audiotape suitable for airing by commercial or non-commercial television stations, radio stations or cable systems.

**COMM 481** Staff
**Internship** 3 credits
(Prerequisites: junior or senior standing, plus appropriate course work, and faculty approval) Highly recommended for every major, although not required, this on-the-job experience is guided by practitioners in the communication field and supervised individually by a faculty member in consultation with the student's advisor and the department chair. An additional 3 credits can be earned—for a maximum of 6 credits—by petition to the Communication Department. (Internship credits cannot be used to fulfill requirements in the COMM. major, minor, or cognate; they can be used in the Elective Area.) See internship director.

**COMM 482** Staff
**Directed Independent Study** 3 credits
(Prerequisite: senior standing) In consultation with the student's advisor and department chair, the Communication Senior undertakes a significant area of study resulting in a major research paper. Students select a communication professor whom they wish to direct the study. Usually taken to augment an area of the student's interest not substantially covered in available departmental courses.

**COMM 484** Staff
**Special Topics** 3 credits
In-depth departmental seminars on selected communication topics meeting the needs and interests of students. Topics vary from semester to semester.

**COMM 499** Staff
**Senior Thesis** 3 credits
(Prerequisites: COMM 310 & COMM 410) An optional research-based written project in which the serious Communication Senior, in consultation with the student's advisor and department chair, selects an issue or problem for scholarly study, undertakes significant and meaningful research, and produces a major paper of publishable quality. Students select a communication professor whom they wish to direct their thesis. Strongly recommended for students who plan to attend graduate school.

# COMPUTING SCIENCES

*PROF. RICHARD M. PLISHKA, Chairperson*

The University of Scranton's Bachelor of Science program in Computer Science dates from 1970 – one of the oldest in the Commonwealth of Pennsylvania. The Computer Science Program is accredited by Computer Science Accreditation Commission (CSAC) of the Computer Science Accreditation Board (CSAB), a specialized accrediting body recognized by the Council for Higher Education Accreditation (CHEA). The Computer Science major provides an integrated introduction to Software Engineering along with the mathematical skills needed in Computer Science. The program culminates in the senior year with the Computer Projects course. Research and internship opportunities are available. The Computing Sciences department may be reached on the World Wide Web at http://www.cs.scranton.edu.

**COMPUTER SCIENCE**

| | Dept. and No. | Descriptive Title of Course | Credits FALL | SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| MAJOR | CMPS 134-144 | Computer Science I-II | 3 | 4 |
| COGNATE | MATH 114 | Analysis I | | 4 |
| GE WRTG-SPCH | WRTG 107 - COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | 3 | |
| GE PHIL | PHIL 120 | Introduction to Philosophy | 3 | |
| GE T/RS | T/RS 121 | Theology I | | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | | 3 |
| GE QUANT | MATH 142 | Discrete Structures | 4 | |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **17** | **18** |
| | | **SECOND YEAR** | | |
| MAJOR | CMPS 240-250 | Data Structures/Machine Org. | 3 | 3 |
| MAJOR | CMPS 260 | Theoretical Foundations | | 3 |
| COGNATE | MATH 221-351 | Analysis II-Linear Algebra | 4 | 3 |
| GE NSCI | PHYS 140-141 | Elements of Physics I-II | 4 | 4 |
| GE PHIL | PHIL 210 | Ethics | 3 | |
| GE T/RS | T/RS 122 | Theology II | | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | 3 | |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **18** | **17** |
| | | **THIRD YEAR** | | |
| MAJOR | CMPS 352-344 | Operating Systems-Program Lang. | 3 | 3 |
| MAJOR | CMPS 340-ELECT 1 | File Processing-Elective | 4 | 3 |
| MAJOR | CMPS 350-374 | Comp. Architecture-Software Eng. | 3 | 3 |
| COGNATE | MATH 310 | Applied Probability & Statistics | 4 | |
| COGNATE | COGNATE[2] | Cognate Elective | | 3 |
| GE S/BH | S/BH ELECT | Social/Behavioral Elective | 3 | |
| GE ELECT | ELECT | Free Elective | | 3 |
| | | | **17** | **15** |
| | | **FOURTH YEAR** | | |
| MAJOR | CMPS 490 | Computer Projects | 3 | |
| MAJOR | CMPS ELECT [1] | Major Electives | | 6 |
| COGNATE | COGNATE[2] | Cognate Elective | 3 | |
| GE PHIL | PHIL 214 | Computers and Ethics | | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE S/BH | S/BH ELECT | Social/Behavioral Elective | 3 | |
| GE ELECT | ELECT | Free Electives | 3 | 3 |
| | | | **15** | **15** |

**Total: 132 CREDITS**

[1] The three electives in the major must be chosen from CMPS 341, 354, 356, 360, 362, 364, 370, 372, 384, 393 and 481.
[2] At least 4 credits must be courses in the natural sciences for science majors which enhance the student's ability in the application of the scientific method. See departmental advisor for acceptable courses.

**MINOR:** To minor in Computer Science, the student must take a minimum of 20 hours including CMPS 134, Math 142, CMPS 144, CMPS 240 and any two of CMPS 250, CMPS 260, CMPS 340, CMPS 344, CMPS 350, CMPS 352, CMPS 360, CMPS 364, CMPS 370, CMPS 372, CMPS 374 or CMPS 384.

# COMPUTER INFORMATION SYSTEMS

This program investigates the analysis, design, development, implementation, evaluation and effective use of computer information systems in organizations. Since business and government are principal users of computers, Computer Information Systems majors will select cognates from the School of Management. Students are encouraged to participate in an internship.

**COMPUTER INFORMATION SYSTEMS**

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **SPRING** |
| MAJOR | CMPS 134-144 | Computer Science I-II | 3 | 4 |
| COGNATE | MATH 114 | Analysis I | | 4 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | 3 | |
| GE WRTG-SPCH | WRTG107-COMM 100 | Compositon-Public Speaking | 3 | 3 |
| GE PHIL | PHIL 120 | Introduction to Philosophy | 3 | |
| GE T/RS | T/RS 121 | Theology I | | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | | 3 |
| GE QUAN | MATH 142 | Discrete Structures | 4 | |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **17** | **18** |
| | | **SECOND YEAR** | | |
| MAJOR | CMPS 240-250 | Data Structures-Machine Org. | 3 | 3 |
| COGNATE | ACC 253-254 | Financial & Managerial Acc. | 3 | 3 |
| GE PHIL | PHIL 210 | Ethics | 3 | |
| GE T/RS | T/RS 122 | Theology II | | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | 3 | |
| GE S/BH | ECO 153-154 | Prin. of Micro.-Macro. Eco. | 3 | 3 |
| GE ELECT | MATH 204 [1] | Statistics | | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **16** | **16** |
| | | **THIRD YEAR** | | |
| MAJOR | CMPS 352-ELECT [2] | Operating Systems-Elective | 3 | 3 |
| MAJOR | CMPS 340-341 | File Processing-Database Systems | 4 | 3 |
| MAJOR | CMPS 330-331 | Info. Sys.-Sys. Analysis & Design | 3 | 3 |
| COGNATE | MGT 351-352 | Principles of Management I & II | 3 | 3 |
| COGNATE | MGT 251 | Legal Environment of Business | | 3 |
| GE NSCI | NSCI ELECT | Natural Science Elective | 3 | |
| GE ELECT | ELECT | Free Elective | | 3 |
| | | | **16** | **18** |
| | | **FOURTH YEAR** | | |
| MAJOR | CMPS 490-ELECT [2] | Computer Projects-Elective | 3 | 6 |
| COGNATE | MKT 351 | Intro. Marketing | 3 | |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE NSCI | NSCI ELECT | Natural Science Elective | 3 | |
| GE PHIL | PHIL 214 | Computers and Ethics | | 3 |
| GE ELECT | ELECT | Free Electives | 3 | 3 |
| | | | **15** | **15** |
| | | | **Total: 131 CREDITS** | |

[1] or STAT 251

[2] Elective courses in the Computer Information Systems major must be CMPS courses numbered 210 or higher.

**MINOR:** To minor in Computer Information Systems, the student must take a minimum of 20 hours including CMPS 134, Math 142, CMPS 144, CMPS 330, CMPS 331 and one of CMPS 202, CMPS 240 or CMPS 340.

**CMPS 108** Staff
**COBOL Programming** 3 credits
(Prerequisite: Previous use of a computer) An introduction to ANSI standard COBOL. Traditional business applications will be emphasized. Topics include internal data representation, data editing, calculations, one-level tables, search, sort and reporting.

**CMPS 134** Staff
**Computer Science I** 3 credits
An introduction to programming concepts and methodology using an appropriate programming language. The course emphasizes a structured programming approach. Topics include problem analysis, modularization, top-down design, and the elements of a programming language.

**CMPS 144** Staff
**Computer Science II** 4 credits
(Prerequisite: CMPS 134 and MATH 142) A sequel to CMPS 134, continuing the study of software development using a modern object-oriented programming language. The course deals with the role of analysis and design in the construction of quality software, emphasizing logical modularization, abstraction, coupling, cohesion, and program correctness. The course also presents the object-oriented concepts of polymorphism and dynamic dispatch and discusses such software engineering concepts as encapsulation, information hiding, and software reuse.

**CMPS 202** Staff
**Web Development** 3 credits
(Prerequisites: one of CMPS 102, 104 or C/IL 102 or equivalent) A course for non-computer science majors that will cover fundamental aspects of the development of personal, professional and business resources using web-development tools. Topics include creating web pages, using basic HTML; advanced HTML concepts; frames; JavaScript to enhance web pages; forms; CGI (common gateway interface); Java classes. Emphasis will be placed on client-side development although server-side issues will also be covered. May not be used by Computer Science or Computer Information Systems students as part of the major. This is a technical course for students who do not necessarily have a technical background.

**CMPS 240** Staff
**Data Structures** 3 credits
(Prerequisite: CMPS 144) An examination of the issues of representation and encapsulation, as they pertain to abstract data types. Measurement of the efficiency of representations and the algorithms that employ them. A modern object-oriented programming language is used.

**CMPS 250** Staff
**Machine Organization and Assembly Language Programming** 3 credits
(Prerequisite: CMPS 144) An introduction to machine organization and architecture. Among the topics discussed will be machine organization, assembler programming, the representation of data, the assembler, input-output routines and the use of macros.

**CMPS 260** Staff
**Theoretical Foundations of Computer Science** 3 credits
(Prerequisite: CMPS 240) An examination of the fundamental models and concepts of computation — automata, formal languages, and grammars — and how they are related. Church-Turing thesis; recursive and recursively renumerable sets; unsolvable problems; complexity of algorithms; Chomsky hierarchy.

**CMPS 330** Staff
**Information Systems** 3 credits
(Prerequisite: CMPS 102/104, C/IL 102, or CMPS 134) Introduction to concepts and practices of information processing. Computerized system requirements and techniques in providing appropriate decision-making information to management.

**CMPS 331** Staff
**Systems Analysis and Design** 3 credits
(Prerequisite: CMPS 330) A study of the system-development methodology and the role played by the systems analyst in developing user-accepted information systems.

**CMPS 340** Staff
**File Processing** 4 credits
(Prerequisites: CMPS 144 required; CMPS 240 recommended.) File-structures concepts and file processing applications using COBOL as a programming language. Topics include file maintenance and storage management; file searching, sorting, and merging; cosequential processing; index structures; B-trees; hash tables; indexed sequential files; database concepts.

**CMPS 341** Staff
**Database Systems** 3 credits
(Prerequisites: CMPS 340 required; CMPS 240 recommended) An introduction to database management systems, DBMS, with an emphasis on relational database design and applications. The primary software used is ORACLE DBMS.

**CMPS 344** Staff
**Programming Languages** 3 credits
(Prerequisite: CMPS 240) A study of programming languages from both the theoretical and practical perspectives. The evolution of languages is reviewed in order to know the design considerations of the past and recognize those of the present. A survey of major and developing paradigms and languages is undertaken which includes use of specific languages to broaden the student's experience. Implementation is studied through an introduction to compiling and interpretation.

**CMPS 350** Staff
**Computer Architecture** 3 credits
(Prerequisite: CMPS 250) A study of the logical structure of computer-system organization including a survey of logic and design with an emphasis on functional components. Topics include instruction sets, hard-wired and micro-programmed control-unit designs, memory systems (caches and virtual memory), I/O systems (interrupts, DMA, and channels). Overview and examples of alternative and advanced computer architectures (pipeline, array processors, multiprocessors).

**CMPS 352** Staff
**Operating Systems** 3 credits
(Prerequisites: CMPS 240 and CMPS 250) The analysis and design of computer systems, including operating-system design, memory management, scheduling, and the implementation of multiprogramming.

**CMPS 354** Staff
**Data Communications and Networks** 3 credits
(Prerequisite: CMPS 352) A study of data communication and networking concepts, including distributed-system architectures, electronic interfaces, data-transmission, data link protocols, terminal networks, computer communication, public-data networks, and local-area networks.

**CMPS 356** Staff
**Web Programming** 3 credits
(Prerequisite: CMPS 240 and HTML experience to the level where the students are capable of developing their own web page) This course covers all aspects of programming on the world wide web. This includes the presentation of HTML, Java, JavaScript and CGI. Topic include advanced HTML (maps, forms, etc.) client-server programming basics as they relate to the web, Java machine concepts, Java/JavaScript similarities and differences, server side programming, GIF animations, web programming resources and environments.

**CMPS 360** Staff
**Analysis of Algorithms** 3 credits
(Prerequisite: CMPS 240) A survey of methods for designing and analyzing algorithms. Classic algorithms from graph theory, combinatorics and text processing are examined, as are traditional design strategies such as divide-and-conquer, backtracking and dynamic programming. Other topics include NP-completeness and parallel algorithms.

**CMPS 362** Staff
**Numerical Analysis** 3 credits
(Prerequisites: CMPS 134 and MATH 222) A survey of numerical methods for solving equations, integration, differentiation, interpolation, differential equations, and linear algebra, and the analysis of error.

**CMPS 364** Staff
**Theory of Computation** 3 credits
(Prerequisite: CMPS 260) The development of a theoretical notion of computability and its relationship to Turing computability and recursive functions; the study of the relationships between automata, formal languages and grammars.

**CMPS 370** Staff
**Computer Graphics** 3 credits
(Prerequisite: CMPS 240) An introduction to the hardware, software and techniques used to generate graphical representations by computer. Two- and three-dimensional concepts and algorithms are studied with corresponding use of popular standard packages (GKS, PHIGS, etc.) to generate images. Advanced topics such as animation and the various aspects of realistic rendering are introduced.

**CMPS 372** Staff
**Artificial Intelligence** 3 credits
(Prerequisite: CMPS 240) Problem solving using expert systems, heuristic programming techniques, tree speed-up techniques, and learning mechanisms.

**CMPS 374** Staff
**Fundamentals of Software Engineering** 3 credits
(Prerequisite: CMPS 240) An introduction to the concepts of Software Engineering. Stress is placed upon formal models for the design and development of high-quality software. Topics include: project planning, requirements analysis, system design, program design, program implementation, program testing, system testing, system delivery, and maintenance. A group project will be included.

**CMPS 384** Staff
**Special Topics** 3 credits each
(Departmental permission required) Topics and prerequisites will be announced prior to preregistration.

**CMPS 393** Staff
**Computer Research** 3 credits
(Departmental permission required) A research project carried out by a student under the direction of a faculty member in the department. The results will be prepared in a form suitable for publication. Reader fee.

**CMPS 440** Staff
**Compiler Design** 3 credits
(Prerequisite: CMPS 344) Study of techniques and problems involved in constructing compilers. Lexical analysis, syntax analysis, semantic analysis, symbol-table management, code generation, code optimization.

**CMPS 481** Staff
**Computer Internship** 3 credits
(Departmental permission required) An intensive job experience in computing which carries academic credit. Prior approval is required and an information booklet is available from the department. Reader fee.

**CMPS 490** Staff
**(W)Computer Projects** 3 credits
(Seniors only. Departmental permission required) In this course students prepare and present individual computer projects to be evaluated by the instructor and their fellow students.

# CRIMINAL JUSTICE

*PROF. JOHN B. PRYLE, Chairperson*

The Bachelor of Science degree program in Criminal Justice has the following objectives: 1. To prepare students for careers in law enforcement at the local. state or federal levels (FBI, Departments of Defense, Treasury, Justice); 2. To prepare students for careers in the field of correction and rehabilitation: parole, prisons, juvenile delinquency, etc.; 3. To provide students with academic preparation for advanced study in law, criminology, public administration and related fields. The Criminal Justice major is administered by the Department of Sociology/Criminal Justice, which also administers the Sociology and Gerontology degree programs. An advisory board of community leaders working in the field of law enforcement and criminal justice has been established to work with University officials and faculty.

## CRIMINAL JUSTICE

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **SPRING** |
| MAJOR | CJ 110-S/CJ 213 | Intro. to Crim. Just.-Criminology | 3 | 3 |
| COGNATE | SOC 110 | Intro to Sociology | 3 | |
| GE C/IL | C/IL 102 | Computing and Information Literacy | | 3 |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE PHIL | PHIL 120 | Introduction to Philosophy | 3 | |
| GE T/RS | T/RS 121 | Theology I | | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **16** | **16** |
| | | **SECOND YEAR** | | |
| MAJOR | S/CJ 210 | Law and Society | 3 | |
| MAJOR | S/CJ 218-S/CJ 220 | Amer. Court System-Penology | 3 | 3 |
| MAJOR | S/CJ 212 | Criminological Research | 3 | |
| GE QUAN | S/CJ 215 | Statistics for the Social Sciences | | 3 |
| GE S/BH | PSYC 110 | Fundamentals of Psychology | | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE PHIL | PHIL 210 | Ethics | 3 | |
| GE T/RS | T/RS 122 | Theology II | | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **16** | **16** |
| | | **THIRD YEAR** | | |
| MAJOR | CJ ELECT | Criminal Justice Electives | 3 | 3 |
| COGNATE | SOC 224[1] | American Minority Groups | 3 | |
| COGNATE | SOC SCI ELECT[1] | Social Science Electives | 3 | 6 |
| GE S/BH | PS 131 | American National Government II | | 3 |
| GE NSCI | NSCI ELECT | Natural Science Electives | 3 | 3 |
| GE ELECT | ELECT[2] | Free Electives | 6 | 3 |
| | | | **18** | **18** |
| | | **FOURTH YEAR** | | |
| MAJOR | CJ ELECT | Criminal Justice Electives | 3 | 6 |
| MAJOR | CJ 480-481 or ELECT | Internships or Electives | 3 | 3 |
| COGNATE | ELECT[1] | Social Science Electives | 3 | 6 |
| GE PHIL-T/RS | PHIL-T/RS ELECT | Philosophy or Theology Elective | 3 | |
| GE ELECT | ELECT[2] | Free Elective | 3 | |
| | | | **15** | **15** |
| | | | **Total: 130 CREDITS** | |

[1] In the cognate, the department recommends PS 135 (State and Local Government); PSYC 225 (Abnormal Psychology); PSYC 224 (Personality); SOC 116 (Community Organization); SOC 118 (Child Welfare); SOC 231 (Urban Sociology); SOC 224 (American Minority Groups); SOC 228 (Social Psychology).

[2] In the elective area, the department strongly recommends ACC 253 (Financial Accounting); ACC 254 (Managerial Accounting); MGT 351 (Principles of Management I), if the student is considering general business as a minor.

**MINOR.** A minor in Criminal Justice will require eighteen credits. There are three required courses: Soc 110 (Introduction to Sociology), CJ 110 (Introduction to Criminal Justice), and S/CJ 213 (Criminology). The following elective courses are strongly recommended by the department in the Criminal Justice sequence: S/CJ 212 (Criminological Research), S/CJ 214 (Juvenile Delinquency), S/CJ 210 (Law and Society), and CJ 312 (Criminal Law).

**CJ 110** Prof. Baker, Dr. Jones
**(S)Introduction to Criminal Justice** 3 credits
A foundation course examining problems in the study of crime and criminal justice, basic elements of criminal law and constitutional rights, and the functions of, as well as the relationship between, major components of the criminal-justice system; agencies and role of law enforcement; prosecution; the judicial process, and corrections.

**S/CJ 210** Prof. Friedrichs
**(S)Law and Society** 3 credits
The relationship between law and society, or the interaction of legal and social variables. Examines jurisprudential and social theories of law; development of law; the role of the legal profession; legal behavior and decision-making; and law and social change.

**S/CJ 212** Dr. Wolfer
**Criminological Research** 3 credits
Survey of methods and techniques for achieving interpretable results in research in the criminal-justice field; research design; data collection.

**S/CJ 213** Prof. Baker, Dr. Jones
**(S)Criminology** 3 credits
Crime as a form of deviant behavior; nature and extent of crime; past and present theories; evaluation of prevention, control and treatment programs.

**S/CJ 214** Dr. Jones
**(S)Juvenile Delinquency** 3 credits
Nature and extent of delinquency: competing explanatory models and theories; evaluation of prevention, control, and treatment programs.

**S/CJ 215** Dr. Wolfer
**(Q)Statistics for the Social Sciences** 3 credits
An introduction to the statistical techniques used by social scientists to analyze their data. Students learn descriptive and inferential statistics in conjunction with computer usage. Basic skills and procedures are taught for organizing and describing data, for assessing relationships among social variables, and for using this information to make inferences about the population.

**S/CJ 218** Atty. Cimini
**(S)The American Court System** 3 credits
Mindful of the role played by our judiciary in resolving disputes, setting policy, and otherwise having an impact on everyday life, this course provides a basic examination of America's courts in terms of their history and development, their structure and organization, their procedures, people, institutions and issues.

**S/CJ 220** Atty. Cimini
**Penology: The American Correctional System** 3 credits
Analysis and evaluation of contemporary correctional systems; theories of punishment; discussion of recent research concerning the correctional institution and the various field services; the history of corrections in Pennsylvania.

**S/CJ 221** Prof. Conlon
**Probation and Parole** 3 credits
Examination of community treatment in the correctional process; contemporary usage of presentence investigation, selection, supervision, release of probationers and parolees.

**S/CJ 224** Prof. Friedrichs
**(S, W)Sociology of Deviance** 3 credits
Critical examination of theories and empirical studies of social deviance, focusing upon the formulation and application of deviant labels, organizations relating to deviance, and deviant behavioral patterns. Special attention given to noncriminal forms of deviance.

**S/CJ 225** Prof. Friedrichs
**White-Collar Crime** 3 credits
A study of white-collar crime, including corporate misdeeds, political corruption, occupational illegalities and upperworld deviance. This course will explore the causes, consequences, and criminal-justice system response to white-collar crime.

**S/CJ 227** Prof. Baker
**Organized Crime Patterns** 3 credits
The national and international organizational structure of organized crime will be analyzed. Primary attention will be given to comparative theories and concepts. The various methods of prosecution, investigation and control will be discussed.

**CJ 230** Prof. Baker
**Crime Prevention** 3 credits
This course analyzes the basic theories of crime prevention and will examine current developments in criminal profiling and crime analysis. A review of crime-prevention concepts utilized in the public and private sectors will focus on programs involving citizens, community, and agency interrelationships.

**S/CJ 232** Prof. Baker
**Public Safety Administration** 3 credits
An overview of the public-safety field – its philosophy, disciplines and research. The course will focus on an examination of the police and governmental responses to disaster and accidents. A primary emphasis will be given to the various analytical approaches to the study of terrorism. Methods of planning, investigation and prevention will be discussed.

**S/CJ 234** Prof. Baker
**Criminal-Justice Management** 3 credits
Basic principles and practices of administration and their application to law enforcement. Relationship of theoretical administrative concepts and practical police problems.

**CJ 237** Prof. Baker
**The Investigative Process** 3 credits
This course considers appropriate investigative procedures concerning major criminal investigations. An analysis of specific investigative theories and courtroom applications will be conducted through learning simulation. The homicide court problem will focus on the preservation and admission of evidence.

**S/CJ 284** Staff
**Special Topics in Criminal Justice** 3 credits
(Prerequisite: consent of the chairperson and the instructor) Courses designed to meet specific needs of individual students or courses offered on a trial basis to determine the value of placing them into the regular curriculum.

**CJ 310** Atty. Cimini
**Criminal Justice Process** 3 credits
A study of the law of criminal procedure, treating investigation and police practices, preliminary proceedings, and trial, as they relate to the development and structure of the American criminal-justice system and as they affect offenders.

**CJ 312** Atty. Cimini
**Criminal Law** 3 credits
A study of substantive criminal law in view of its historical foundations, purpose, functions and limits; of crime and defenses generally; and of the elements which constitute certain specific crimes under state and federal statutes.

**S/CJ 314** Atty. Cimini
**The Bill of Rights and C.J.** 3 credits
From the perspective of the criminal-justice professional, this course addresses key principles enunciated in the first, fourth, fifth, sixth, eighth and fourteenth amendments to *The Constitution of the United States.*

**S/CJ 316** Atty. Cimini
**Principles of Evidence** 3 credits
An examination of the law of evidence as it pertains to the trial of a criminal case. A discussion of the common law, pertinent statutes, judicial opinions, and rules (e.g., *The Federal Rules of Evidence)* as these relate to such concepts as direct and circumstantial evidence; opinion testimony, experts and exhibits; competence, relevance and materiality; privileges, hearsay and its exceptions.

**S/CJ 317** Atty. Cimini
**Trial, Jury and Counsel** 3 credits
A consideration of the rights guaranteed by the Sixth Amendment to *The Constitution of the United States*, surveying constitutional provisions, statutes, court rules, and cases concerning the right of a criminal defendant to a speedy and public trial, to trial by jury, and to the assistance of counsel.

**S/CJ 318** Atty. Cimini
**Civil Liability** 3 credits
An examination of the law enforcement officer or employee as a defendant in a civil suit arising from the scope of his or her employment. Liability based upon rights statutes is examined, along with consideration of the typical defenses.

**S/CJ 324** Prof. Friedrichs
**Victimology** 3 credits
An examination of the causes and consequences of crime victimization. The recent emergence of the study of the victim, the types and circumstances of victimization, and the nature of the criminal-justice system's response to crime victims are considered, along with the ethical and practical dimensions of crime victimization.

**CJ 382-383** Staff
**Independent Study** 3 credits
**in Criminal Justice**
(Prerequisite: consent of the chairperson and the instructor) Directed projects and surveys in criminal justice, law enforcement, and corrections designed to give the student academic flexibility.

**CJ 480-481** Prof. Pryle
**Internship Experience** 3 credits
(Prerequisite: permission of instructor) Supervised experiential learning in an approved criminal-justice setting taken preferably in junior and senior year.

# ECONOMICS

*DR. SATYAJIT GHOSH, Chairperson*

The Arts and Sciences major in Economics offers students a strong general liberal-arts background and at the same time a thorough grounding in the most quantitative of the social sciences. Its major requirements parallel those of The Kania School of Management Economics major (see p. 226), while its cognate provides background in the social sciences. This major is especially appropriate for students intending graduate studies in Economics, or careers in law or government service. Course descriptions for major courses begin on p. 227.

**MINOR:** 18 credits consisting of ECO 153-154; (or ECO 101, 102); ECO 361-362, plus two upper-level economics courses.

**ECONOMICS**

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **SPRING** |
| MAJOR (GE S/BH) | ECO 153-154 | Principles of Micro-Macro Economics | 3 | 3 |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 3 | 3 |
| GE PHIL | PHIL 120 | Introduction to Philosophy | 3 | |
| GE T/RS | T/RS 121 | Theology I | | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | | 3 |
| GE QUAN/ELECT | MATH [1] | Math Option | 3 | 3 |
| GE HUMN | HUMN ELECT [2] | Humanities Elective | 3 | |
| GE FSEM-PHED | INTD 100-PHED ELECT | Freshman Seminar-Physical Education | 1 | 1 |
| | | | **16** | **16** |
| | | **SECOND YEAR** | | |
| MAJOR | ECO 361-362 | Intermediate Micro-Macro Econ. | 3 | 3 |
| MAJOR | STAT 253 | Statistics for Economics | | 3 |
| COGNATE | ACC 253 | Financial Accounting | 3 | |
| COGNATE | COGNATE ELECTIVE | Cognate Elective | | 3 |
| GE PHIL-T/RS | PHIL 210-T/RS 122 | Ethics-Theology II | 3 | 3 |
| GE NSCI | NSCI ELECT | Natural Science Electives | 3 | 3 |
| GE HUMN | HUMN ELECT | Humn. Electives (HIST 110-111 recom.) | 3 | 3 |
| GE ELECT | ELECT [3] | Free Elective | 3 | |
| | | | **18** | **18** |
| | | **THIRD YEAR** | | |
| MAJOR | ECO/IB 351 | Environment of International Business | | 3 |
| MAJOR | ECO 460 | Monetary & Fin. Eco. | 3 | |
| MAJOR | ECO ELECT | Economics Elective | 3 | 3 |
| COGNATE | FIN 351 | Intro. to Finance | | 3 |
| COGNATE | COGNATE ELECT[4] | Cognate Electives | 3 | 3 |
| GE PHIL or TR/S | PHIL or T/RS | Elective | 3 | |
| GE ELECT | ELECT | Free Elective | 3 | 3 |
| | | | **15** | **15** |
| | | **FOURTH YEAR** | | |
| MAJOR | ECO ELECT | Economics Elective | 3 | |
| MAJOR | ECO ELECT-ECO 490 | Eco. Elective-Seminar | 3 | 3 |
| COGNATE | COGNATE ELECT [4] | Cognate Electives | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE ELECT | ELECT | Free Electives | 3 | 6 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **16** | **16** |

**Total: 130 Credits**

[1] See note on Math Options in Undergraduate Catalog, page 220.

[2] If EDUC 113 is required in the first semester, it is taken in place of a humanities elective and is counted as a GE free elective. One GE free elective in the fourth year must then be taken as a humanities elective.

[3] If a third math course is required, it replaces this GE elective.

[4] Economics majors may apply up to six cognate credits toward a Math minor. Students taking the sequence open to Math majors are strongly urged to complete the calculus sequence by taking MATH 222, particularly if they plan on pursuing graduate studies.

Economics majors in the College of Arts and Sciences will apply their elective cognate credits to the following areas (exceptions require the permission of the CAS Dean): Political Science, Psychology, Public Administration, Sociology. Nine credits must be in the same field.

# ENGINEERING

*DR. ROBERT A. SPALLETTA, Director*

Engineering is the profession in which a knowledge of the mathematical and natural sciences gained by study, experience, and practice is judiciously applied to develop ways to utilize, economically, the materials and forces of nature for the benefit of mankind. A number of majors are available.

## COMPUTER ENGINEERING

The undergraduate Computer Engineering curriculum is broad-based with continually updated content in computers, engineering science, and engineering design. The objectives of this program are to prepare our students for a professional career in computer engineering and to prepare them for advanced study in computer engineering, computer science, or electrical engineering. The technical core of the program emphasizes theoretical and laboratory skills, hardware and software skills, simulation and design.

Students in the Computer Engineering program study basic science, mathematics, computer science, electrical engineering, design, writing, public speaking, and the liberal arts in order to prepare for a professional career or advanced studies. The program includes courses from the programs of Computer Science and Electrical Engineering, providing balanced coverage and integration of the hardware and software aspects of computer systems. The design process is emphasized throughout all four years, and design projects are included in all laboratory courses. The sophomore and junior years include core courses in computer algorithms, digital system design, computer architectures, microprocessor systems, computer interfacing, and programming. This provides a foundation for the senior year, which includes electives and an in-depth two-semester design project.

Career opportunities in computer engineering range from computer applications such as computational medicine, oceanic engineering, and office automation to robotics, software engineering systems design, graduate study, reliability and other applications such as neural networks.

# COMPUTER ENGINEERING

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **SPRING** |
| COGNATE | PHYS 140-141 | Elements of Physics I-II | 4 | 4 |
| COGNATE | CMPS 134-144 | Computer Science I-II | 3 | 4 |
| COGNATE | MATH 142-114 | Discrete Structures-Analysis I | 4 | 4 |
| GE HUMN | HUMN ELECT | Elective | 3 | |
| GE WRTG | WRTG 107 | Composition | | 3 |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE C/IL | C/IL 102 | Computing and Information Literacy | | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | |
| | | | **16** | **18** |
| | | **SECOND YEAR** | | |
| MAJOR | E/CE 240-EE 241 | Intro. to Computer Engineering I-Circuit Analysis | 3 | 4 |
| COGNATE | PHYS 270 | Modern Physics | 4 | |
| COGNATE | EE 243L | Digital System Design Lab | | 2 |
| COGNATE | MATH 221-222 | Analysis II-Analysis III | 4 | 4 |
| COGNATE | CMPS 240 | Data Structures | 3 | |
| MAJOR | CMPS 250 | Machine Organization | | 3 |
| GE PHIL | PHIL 120 - 210 | Introduction to Philosophy-Ethics | 3 | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | |
| GE SPCH | COMM 100 | Public Speaking | | 3 |
| | | | **18** | **19** |
| | | **THIRD YEAR** | | |
| MAJOR | EE 343-344 | Electronic Circuits I-II | 5 | 3 |
| MAJOR | ENGR 350 | Applied & Engineering Math | 3 | |
| MAJOR | EE 346 | Digital Signal Processing | | 3 |
| MAJOR | CMPS 350 - E/CE 340 | Computer Architecture-Digital Systems | 3 | 3 |
| COGNATE | CHEM 112 | General and Analytical Chemistry | 4½ | |
| GE HUMN | HUMN ELECT | Humanities Elective | | 3 |
| GE S/BH[1] | S/BH ELECT[1] | Social-Behavioral Electives | 3 | 3 |
| GE T/RS | T/RS 121 | Theology I | | 3 |
| | | | **18½** | **18** |
| | | **FOURTH YEAR** | | |
| MAJOR | EE 449 | Computer Interfacing | 5 | |
| MAJOR | EE 450 - 454 | Control Systems-Robotics Design | 3 | 3 |
| MAJOR | CMPS 374 | Fundamentals of Software Engineering | | 3 |
| COGNATE | ENGR 250 | Engineering Mechanics-Statics | 3 | |
| MAJOR | CMPS 352[2] - 344 | Operating Systems-Programming Languages | 3 | 3 |
| GE T/RS or PHIL | T/RS or PHIL | Philosophy/Theology elective | | 3 |
| GE T/RS | T/RS 122 | Theology II | 3 | |
| GE HUMN | HUMN ELECT | Electives | | 6 |
| GE PHED | PHED ELECT | Physical Education | 1 | |
| | | | **18** | **18** |

**Total: 143½ credits**

[1] ECO 153 - 154 suggested

[2] Or technical elective in Physics (PHYS 372, 447, 460, 473, 474)

# ELECTRONICS-BUSINESS

The state of the business world today is such that a major portion of its administrative effort must be geared to the supervision of persons engaged in complex technological processes often involving applications of electronics. As a consequence, the ideal administrator is now one who is conversant with both good business practice and technological know-how. The Electronics-Business major provides a student with a program of carefully selected business and economics courses coupled with a series of coordinated physics and electrical engineering courses so as to provide preparation for an administrative career in an electronically oriented business enterprise. The program also provides sufficient preparation for further studies leading to the Master's in Business Administration.

**ELECTRONICS-BUSINESS**

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **SPRING** |
| MAJOR (S/BH) | ECO 153-154 | Prin. of Micro.-Prin. of Macroeconomics | 3 | 3 |
| COGNATE (GE QUAN) | MATH 103-114 or MATH 114-221 | Pre-Calc.-Analysis I or Analysis I-Analysis II | 4 | 4 |
| COGNATE (GE NSCI) | PHYS 140-141 | Elements of Physics I-II | 4 | 4 |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | 3 | |
| GE PHIL | PHIL 120 | Introduction to Philosophy | | 3 |
| GE FSEM-PHED | INTD 100-PHED | Freshman Seminar-Physical Education | 1 | 1 |
| | | | **18** | **18** |
| | | **SECOND YEAR** | | |
| MAJOR | E/CE 240 | Introduction to Computer Engineering | 4 | |
| MAJOR | EE 241 | Circuit Analysis | | 4 |
| MAJOR | ACC 253-254 | Financial, Managerial Accounting | 3 | 3 |
| MAJOR | ENGR 252 | Solid State Material Science | | 3 |
| COGNATE | PHYS 270 | Elements of Modern Physics | 4 | |
| COGNATE | MATH 221-222 or MATH 222-341 | Analysis II-III or Analysis III-Differential Equations | 4 | 4 |
| GE HUMN | HUMN ELECT | Humanities Elective | 3 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **18** | **15** |
| | | **THIRD YEAR** | | |
| MAJOR | EE 343-344 | Electronic Circuits I-II | 5 | 3 |
| MAJOR | STAT 251-252 | Statistics for Business I-II | 3 | 3 |
| GE PHIL | PHIL 210 | Ethics | 3 | |
| GE T/RS | T/RS 121-122 | Theology I-II | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | 3 | 3 |
| GE PHIL or T/RS | PHIL or T/RS | Elective | | 3 |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **17** | **16** |
| | | **FOURTH YEAR** | | |
| MAJOR | MGT 351 | Principles of Management I | 3 | |
| MAJOR | MKT 351 | Introduction to Marketing | | 3 |
| MAJOR | FIN 351 | Introduction to Finance | 3 | |
| MAJOR | OIM 352 | Introduction to Operations Management | | 3 |
| MAJOR | OIM 351 | Introduction to Management Science | 3 | |
| GE HUMN | HUMN ELECT | Humanities Elective | | 3 |
| GE ELECT | ELECT | Electives | 6 | 6 |
| | | | **15** | **15** |

**Total: 132 credits**

# ELECTRICAL ENGINEERING

The Electrical Engineering major of the Department of Physics/EE prepares the student for the analysis and design of electronic systems and devices whose principal functions are the shaping and control of information. The Department of Physics/EE offers four areas of focus: Computer Engineering, Biomedical Engineering, Optical Engineering, and Environmental Instrumentation Engineering. The specific electives for these areas of focus will be chosen in consultation with the student's academic advisor.

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **SPRING** |
| COGNATE (GE NSCI) | PHYS 140-141 | Elements of Physics I-II | 4 | 4 |
| COGNATE (GE QUAN) | MATH 114-221 | Analysis I-II | 4 | 4 |
| GE WRTG-SPCH | WRTG 107- COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE C/IL-ELECT | C/IL 102-CMPS 134 | Comp. & Info. Lit.-Intro. to CMPS | 3 | 3 |
| GE PHIL-T/RS | PHIL 120-T/RS 121 | Intro. to Philosophy-Theology I | 3 | 3 |
| GE FSEM-PHED | INTD 100-PHED | Freshman Seminar-Physical Education | 1 | 1 |
| | | | **18** | **18** |
| | | **SECOND YEAR** | | |
| MAJOR | E/CE 240-EE241 | Intro to Computer Engr.-Circuit Analysis | 3 | 4 |
| MAJOR | EE 243L | Digital System Design Lab | | 2 |
| COGNATE | ENGR 250-252 | Statics- Solid State Materials | 3 | 3 |
| COGNATE | ENGR 253-254 | Intro. to CAD-3-D CAD | 1 | 1 |
| COGNATE | PHYS 270 | Elements of Modern Physics | 4 | |
| COGNATE | MATH 222-341 | Analysis III- Differential Equations | 4 | 4 |
| COGNATE | CHEM 112 | General and Analytical Chemistry | 3 | |
| GE PHIL | PHIL 210 | Ethics | | 3 |
| | | | **18** | **17** |
| | | **THIRD YEAR** | | |
| MAJOR | EE 447-448 | Electromagnetics I-II | 3 | 4 |
| MAJOR | EE 343-344 | Electronic Circuits I-II | 5 | 3 |
| MAJOR | EE 346 | Digital Signal Processing | | 3 |
| COGNATE | COGNATE ELECT [1] | Elective | | 3 |
| COGNATE | ENGR 350 | Applied and Engineering Math | 3 | |
| GE T/RS | T/RS 122 | Theology II | 3 | |
| GE HUMN | HUMN ELECT | Humanities Elective | 3 | 3 |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **17** | **17** |
| | | **FOURTH YEAR** | | |
| MAJOR | EE 449 | Computer Interfacing | 5 | |
| MAJOR | EE 451 | Communications Systems | | 3 |
| MAJOR | EE 450 | Control Systems | 3 | |
| MAJOR | EE 452-453 | VLSI I-II | 2 | 2 |
| MAJOR | EE 454 | Robotics Design Project | | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE S/BH | S/BH ELECT [2] | Social-Behavioral Elective | 3 | 3 |
| GE T/RS or PHIL | T/RS or PHIL | Elective | | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | |
| | | | **17** | **17** |

**Total: 139 CREDITS**

[1] An advanced technical elective approved by the department.
[2] ECO 101 is recommended by the department.

# PRE-ENGINEERING

The University provides a pre-engineering program which introduces the student to the highly technical training necessary for all phases of the engineering profession. This is a two-year course of study which enables the student to transfer to another school to complete his or her degree work.

Of special importance is The University of Scranton's association with the Cooperative Engineering Program at the University of Detroit Mercy, and its programs in chemical, civil, electrical, environmental, and mechanical engineering. For the student who has completed the pre-engineering curriculum at The University of Scranton, the Detroit Mercy three-year cooperative program offers alternate semesters of formal instruction and work experience in industry. A direct transfer program is available with Widener College, which may be either a co-op program beginning in the summer preceding the junior year or a regular two-year program. In addition to the valuable experience gained from industry, many students have been able to pay the cost of their tuition from the remuneration received for their work. This amounts to a substantial equivalent scholarship grant. Other schools into which University of Scranton students transfer include Lehigh, Bucknell, Penn State and Drexel.

Generally, different engineering programs have slightly different requirements which must be completed before starting the junior year. These will vary from school to school. Therefore, students should, before beginning the sophomore year, consult with an advisor at the institution at which they plan to complete their studies.

# ENGINEERING TRANSFER PROGRAM

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **SPRING** |
| COGNATE (GE NSCI) | PHYS 140-141 | Elements of Physics I-II | 4 | 4 |
| COGNATE | CMPS 134 | Computer Science I | | 3 |
| COGNATE (GE QUAN) | MATH 114-221 | Analysis I-II | 4 | 4 |
| GE WRTG-SPCH | ENGL 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE C/IL | C/IL102 | Computing and Information Literacy | 3 | |
| GE PHIL | PHIL 120 | Introduction to Philosophy | 3 | |
| GE T/RS | T/RS 121 | Theology I | | 3 |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **18** | **18** |
| | | **SECOND YEAR** | | |
| MAJOR | EE 240 | Introduction to Digital Circuits | 3 | |
| MAJOR | EE 241 | Circuit Analysis | | 4 |
| MAJOR | ENGR 250-252 | Statics Solid Material Science | 3 | 3 |
| MAJOR | ENGR 253-254 | Introduction to CAD-3-D CAD | 1 | 1 |
| COGNATE | PHYS 270 | Elements of Modern Physics | 4 | |
| COGNATE | MATH 222-341 | Analysis II-Diff. Equations | 4 | 4 |
| COGNATE | CHEM 112-113[1] | General & Analytical Chem I-II | 3 | 3 |
| GE ELECT | ELECT | Elective | | 3 |
| | | | **18** | **18** |
| | | | **Total: 72 CREDITS** | |

[1]EE Major Elective may be substituted for CHEM 113

**ENGR 250** Staff
**Engineering Mechanics-Statics** 3 credits
(Prerequisite: PHYS 140; pre- or co-requisite: MATH 221) Various types of force systems; resultants and conditions of translational and rotational equilibrium; stress analysis of the parts of different types of structures by graphical, algebraic and vector methods; frictional forces; centroids and second moments of areas of solids. 3-hour lecture.

**ENGR 251** Staff
**Engineering Mechanics-Dynamics** 3 credits
(Prerequisite: ENGR 250; pre- or co-requisite: MATH 222) Kinematics of particles and rigid bodies which include linear, curvilinear, angular and relative motions; inertia forces, impulse, momentum, work, energy and power; mechanical vibrations. 3-hour lecture.

**ENGR 252** Dr. Varonides, Prof. Kalafut
**Solid State Materials Science** 3 credits
(Prerequisites: PHYS 270, MATH 222) The crystalline state of matter; multielectron atoms and the band theory of solids; quantum statistics; applications to p-n junction diodes including photodetectors, LEDs and photovoltaics; biopolar and field-effect transistors; transistor modeling. 3-hour lecture.

**ENGR 253** Dr. Connolly
**An Introduction to Computer-Aided Design** 1 credit
(Prerequisites: MATH 114, CMPS 134) This course is an introduction to the methods of drafting and design using computer-aided techniques. Topics to be covered include plane geometry construction, projection theory, sectional views, dimensioning, tolerancing and the development of working drawings. Extensive use will be made of commercially available CAD software packages. 2-hour laboratory.

**ENGR 254** Dr. Connolly
**3D Computer-Aided Design** 1 credit
(Prerequisite: ENGR 253) This course is an advanced computer-aided design lab with emphasis on three-dimensional techniques. Topics to be covered include wireframe and solid modeling, rendering and boolean operations. A number of classes will be devoted to the use of a finite-element program for mechanical analysis of CAD designs. Extensive use will be made of commercially available software packages. 2-hour laboratory.

**ENGR 350** Dr. Fahey
**Applied and Engineering Mathematics** 3 credits
(Prerequisite: MATH 222, PHYS141) First- and second-order differential equations with constant coefficients; Fourier series, Fourier Transforms and Laplace transforms; partial differential equations and boundary-value problems; special functions (e.g., Bessel functions and Legendre polynomials); numerical analysis and use of maple software. (Also listed as PHYS 350.) 3-hour lecture.

**ENGR 352** Dr. Varonides
**Statistical and Engineering Thermodynamics** 3 credits
(Prerequisite: PHYS 270) Derivation of Thermo-dynamics from probability theory and atomic physics; Laws of Thermodynamics; Maxwell relations; chemical potential and phase changes; refrigerators and heat pumps; theory of gasses and theory of solids. Special topics dependent upon interests of majors represented. (Also listed as PHYS 352.) 3-hour lecture.

**E/CE 240** Dr. Berger
**Introduction to Computer Engineering** 3 credits
(Formerly EE 240) Introduction to combinational and sequential digital-logic circuits. Analysis and design techniques including Boolean algebra and Karnaugh mapping. Use of the computer to simulate digital circuits. 3-hour lecture.

**EE 241** Staff
**Circuit Analysis** 4 credits
(Prerequisite: PHYS 141, pre- or co-requisite: MATH 222) Intermediate course treating Kirchhoff's Laws, resistive networks, systematic methods, network theorems, first-and second-order transients, and sinusoidal steady-state. Introduction to SPICE. 3-hour lecture and 2-hour laboratory.

**EE 243L** Dr. DiStefano
**Digital System Design Laboratory** 2 credits
(Formerly EE 345L) Introduction to the design, construction and testing of digital logic circuits. Most of the major components of a computer will be investigated. Use of computer program to draw circuits and designs. 3 hours laboratory.

**E/CE 340** Staff
**Digital Systems** 3 credits
(Prerequisites: E/CE 240, MATH 142, CMPS 350) Analysis and design of advanced digital circuits, minimization techniques, combinational and sequential circuit design and numerical techniques. The interdependence of hardware and software on computer design will be stressed.

**EE 343** Dr. Varonides
**Electronic Circuits I** 3 credits
(Prerequisites: EE 241, ENGR 252) Analysis and design of analog electronic circuits using diodes, BJTs, and FETs. Emphasis is placed on amplifier circuits and their frequency dependence. 3-hour lecture.

**EE 343L** Dr. Zakzewski
**Electronic Circuits I Lab** 2 credits
(Co-requisite: EE 343) Experiments with diodes, BJTs, JFETs and MOSFETs. Some of the experiments are short projects to introduce the student to the application of design principles. 3 hours laboratory.

**EE 344** Dr. Zakzewski
**Electronic Circuits II** 3 credits
(Prerequisite: EE 343, EE 343L) Laboratory-oriented course designed to acquaint students with the operation and design of electronic instrumentation. Analysis of electronic instruments used in various applications and the design of special-purpose instrumentation. Emphasis on use of operational amplifiers in design situations. 1 hour lecture and 3 hours laboratory.

**EE 346** Dr. Berger
**Digital Signal Processing** 3 credits
(Prerequisite: EE 240, EE 241) A study of discrete-time signals and systems, convolution, z-transform, discrete Fourier transform, and FFT algorithms. Analysis and design techniques for digital filters and their realizations. Emphasis will be on the use of computer-aided interactive digital-signal processing programs for several projects on signal analysis and filter design. 3-hour lecture.

**EE 447** Dr. Varonides
**Electromagnetics I** 3 credits
(Prerequisites: PHYS 270, ENGR 350) Analytic treatment of electrical and magnetic theory; vector calculus of electrostatic fields; dielectric materials; vector calculus of magnetic fields. (Also listed as PHYS 447.) 3-hour lecture.

**EE 448** Staff
**Electromagnetics II** 3 credits
(Prerequisite: EE 447) Magnetic materials, electromagnetic induction, displacement currents, Maxwell's equations; radiation and waves; applications include transmission lines, wave guides, and antennas. (Also listed as PHYS 448.) 3-hour lecture.

**EE 448L** Dr. Zakzewski
**Electromagnetics Design Laboratory** 1 credit
(Co-requisite: EE 448) Laboratory designed to emphasize and reinforce the experimental basis of electromagnetism. Multi-week projects require the student to perform experiments that measure fundamental electrical constants, the electrical and magnetic properties of matter, and the properties of electromagnetic waves. (Also listed as PHYS 448L.) 2-hour laboratory.

**EE 449** Dr. Spalletta
**Computer Interfacing** 5 credits
(Prerequisites: EE 344. EE 346) Microprocessor programming and interfacing; data acquisition, manipulation and transmission; microprocessor support devices and common computer interfaces. Periodic written and oral presentations are required. 3-hour lecture and 4 hours laboratory.

**EE 450** Staff
**Control Systems** 3 credits
(Prerequisites: EE 344, ENGR 350) Review of system modeling and Laplace Transforms; block diagram reduction and signal-flow graphs; transient and steady-state control-system characteristics; root locus and frequency-response methods of analysis and compensation design; state variable methods. 3-hour lecture.

**EE 451** Staff
**Communication Systems** 3 credits
(Prerequisites: EE 344, ENGR 350) A study of the principles of communication theory with emphasis given to analog and digital communications. Modulation techniques such as AM, DSB, SSB, and FM are discussed in detail. Performance of these systems in the presence of noise is also studied. 3-hour lecture.

**EE 452** Dr. DiStefano
**Very Large Scale Integration Devices I** 2 credits
(Prerequisites: EE 240, EE 344) Analysis of MOSFET and CMOS circuitry. Use of computer programs such as SPICE and OCTTOOLS to design and analyze student design projects involving tens of transistors. 2 hours lecture.

**EE 453** Dr. DiStefano
**Very-Large-Scale Integration Devices II** 2 credits
(Prerequisite: EE 452) Continuation of EE 452. VLSI computer compilers are used to design electronic circuits. 1 hour lecture and 2-hour laboratory.

**EE 454** Dr. Spalletta
**Robotics Design Project and Professional Practice** 3 credits
(Prerequisites: EE 449, EE 450) Students work with the faculty and/or a practicing electronics engineer to design a self-contained intelligent robot. This robot will be required to navigate a maze, carry out a task (such as retrieving a specific object) and return through the maze. Each project involves creative conception, design, development and evaluation and must consider economic constraints as well as factors such as reliability and safety. Written and oral presentations before a group of faculty. 1 hour lecture and 3 hours laboratory.

**EE 484** Dr. Varonides
**Superconductivity Devices and Circuits** 3 credits
(Prerequisites: EE 447 and ENGR 252) A course designed for students with interest in superconductivity. Strong background in calculus, electromagnetics and solid-state devices is necessary. Topics to be discussed are: (a) perfect conductivity, the classical model of superconductivity, and direct applications; (b) the quantum model of superconductivity, Josephson junctions and superconducting devices (SQUID's). Homework problems routinely assigned. Group projects (literature search and brief presentations at the end of the term).

# ENGLISH

*DR. JONES DeRITTER, Chairperson*

The English Department offers courses in literature, theatre, writing, film, pedagogy, and theory. Courses are designated as English (ENLT), Theatre (THTR), and Writing (WRTG) and are described below under these groupings. In addition to the majors in English and Theatre described in the following section, the department offers minors in English, Theatre, and Writing. If they wish, English majors may pursue either *minors* or *tracks* in Theatre and Writing. English majors pursuing *tracks* in Writing or Theatre may place these courses in either the elective or cognate area of the major. English majors pursuing *minors* in Writing or Theatre may place these courses in the cognate area but not in the elective area of the major. (Courses used for a minor cannot be applied to requirements or electives within the major.)

**ENGLISH MAJOR.** The student majoring in English must take ENLT 140 (English Inquiry) or the equivalent, and twelve other courses designated ENLT, THTR, or WRTG. Students are required to take at least one course in each of the following areas:

A. British Literature: Medieval and Renaissance (ENLT 234, 235, 240, 340, 342, 343)
B. British Literature: Restoration and Eighteenth Century (ENLT 241, 345)
C. British Literature: Romantic and Victorian (ENLT 238, 242, 347, HUM 286)
D. American Literature to 1865 (ENLT 212, 230, 243, 350, 351)
E. Modern British Literature (ENLT 239, 244, 361)
F. American Literature, 1865 to the Present (ENLT 245, 353, 355, 455)

In addition, of the twelve courses beyond ENLT 140 or the equivalent, at least one must be at the 300 level, at least one must be a 400-level senior seminar, at least one more must be at the 300 or 400 level, and at least one must be designated Theory Intensive: ENLT 225, 228, 341, 462. Students may place Theatre and/or Writing courses in either the English major or the cognate area, but no course can be counted for both the major and the cognate. Although the English department strongly recommends ENLT 140 as the initial course in the major, any ENLT course numbered from 120 to 179 may serve as an equivalent and be substituted both in the major and as a prerequisite for more advanced course work. A total of no more than two courses with a number between 120 and 179 can be counted toward the major.

**THEATRE TRACK.** Completion of this track will be noted on the English major's transcript. The student must complete a minimum of five courses (15 credits). Courses counted toward the track include any course designated with the THTR prefix; WRTG 215, 217, 315; and ENLT 211, 220, 295, 340, 341, 345, 355.

**WRITING TRACK.** Completion of this track will be noted on the English major's transcript. The student must complete a minimum of five courses (15 credits) designated with the WRTG prefix and numbered at the 200 level or above. Of these five courses, at least one must be in Creative Writing (WRTG 213, 214, 215, 216, 217, 313, 314, 315, 316), and at least one must be in Applied Writing (WRTG 210, 211, 212).

**ENGLISH MINOR.** To minor in English, the student must take a minimum of six courses (18 credits). One of these courses must be ENLT 140 or the equivalent (see above). The remaining 15 credits must be taken in courses that would satisfy area or elective requirements for the major. (In other words, no more than two courses with a number between 120 and 179 can be counted toward the minor.)

**THEATRE MINOR.** To minor in Theatre, the student must take a minimum of six courses (18 credits). Three courses are required: THTR 110, THTR 111 and either THTR 211 or THTR 212. Elective courses counted toward the minor include any course with the THTR prefix and/or WRTG 215, 217, or 315. The student may also include one of the following literature courses: ENLT 122, 211, 220, 295, 340, 341, 345, 355, 461.

**WRITING MINOR**: To minor in Writing, the student must take a minimum of six courses (18 credits). All six courses must carry the WRTG prefix, and all six must be listed at the 200 level or above. The student must take at least one course in Creative Writing (WRTG 213, 214, 215, 216, 217, 313, 314, 315, 316) and one course in Applied Writing (WRTG 210, 211, 212).

## ENGLISH

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **SPRING** |
| MAJOR | ENLT 140 | English Inquiry | 3 | |
| MAJOR | ENLT | Area Requirement | | 3 |
| MAJOR | ENLT-WRTG-THTR | Major Elective | | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | 3 | |
| GE QUAN | QUAN ELECT | Quantative Reasoning Elective | | 3 |
| GE WRTG | WRTG 107 | Composition | 3 | |
| GE COMM | COMM 100 | Public Speaking | | 3 |
| GE C/IL | C/IL 103 | Computing & Information Literacy | 3 | |
| GE PHIL-T/RS | PHIL 120-T/RS 121 | Intro to Philosophy -Theology I | 3 | 3 |
| GE FSEM - PHED | INTD 100-PHED ELECT | Freshman Seminar-Physical Education | 1 | 1 |
| | | | **16** | **16** |
| | | **SECOND YEAR** | | |
| MAJOR | ENLT | Area Requirement | 3 | 3 |
| MAJOR | ENLT--WRTG--THTR | Area Requirement and/or Elective | 3 | 3 |
| COGNATE | COGNATE ELECT | Electives | 3 | 3 |
| GE PHIL-T/RS | PHIL 210-T/RS 122 | Ethics-Theology II | 3 | 3 |
| GE NSCI | NSCI ELECT | Natural Science Electives | 3 | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **16** | **16** |
| | | **THIRD YEAR** | | |
| MAJOR | ENLT | Area Requirement | 3 | 3 |
| MAJOR | ENLT--WRTG--THTR | Area Requirement and/or Elective | | 3 |
| COGNATE | COGNATE ELECT | Electives | 6 | 6 |
| GE PHIL-T/RS | PHIL 210-T/RS 122 | Electives | 3 | |
| GE S/BH | S/BH ELECT | Social-Behavioral Electives | 3 | 3 |
| GE ELECT | ELECT | Free Electives | 3 | 3 |
| | | | **18** | **18** |
| | | **FOURTH YEAR** | | |
| MAJOR | ENLT 490 or 491 | Senior Seminar | 3 | |
| MAJOR | ENLT--WRTG--THTR | Area Requirement and/or Electives | 3 | 3 |
| COGNATE | COGNATE ELECT | Electives | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | | 3 |
| GE ELECT | ELECT | Free Electives | 6 | 6 |
| | | | **15** | **15** |
| | | | | **Total: 130 CREDITS** |

**All ENLT courses numbered 200 or above have levelled prerequisites:**

1. For 200-level course—ENLT 140 or equivalent (ENLT course numbered 120-179)
2. For 300-level course—ENLT 140 or equivalent; 200-level ENLT course strongly recommended
3. For 400-level course—ENLT 140 or equivalent; 300-level ENLT course strongly recommended

**ENLT 103** Staff
**Children's Literature** 3 credits
*Formerly ENGL 130*

A broad study of literature for children since 1800, with the emphasis on American works since 1950, including aesthetic consideration of the art and design of picture books. Works for children up to the age of 12 are considered.

**ENLT 110** Dr. McInerney
**History of Cinema** 3 credits
*Formerly ENGL 124*

A study of the historical development of motion pictures. Practitioners in America and throughout the world are treated in this concise history of cinema. Film screening fee.

**ENLT 111** Dr. McInerney
**The Art of Cinema** 3 credits
*Formerly ENGL 125*

The study of the artists, technicians and businessmen who make films. Taped interviews of internationally famous filmmakers, as well as an analytic scrutiny of modern films, develop students' intelligent, active participation in the major art form in modern culture. Film screening fee.

**ENLT 112** Dr. McInerney
**Film Genres** 3 credits
*Formerly ENGL 126*

A study of the popular film genres (i.e., the western, the thriller, the musical, the historical epic, the woman's picture) as they developed and changed in the U.S. and abroad. Film screening fee.

**ENLT 113** Dr. McInerney
**Film Criticism** 3 credits
*Formerly ENGL 127*

A study of the grammar, poetics, rhetoric, and aesthetic of film criticism constitutes the heart of this course. Film screening fee.

**ENLT 120** Staff
**(C)Introduction to Fiction** 3 credits
*Formerly ENGL 102*

An exploration of the nature of prose fiction, its elements and techniques. The emphasis is critical rather than historical. The range of works and the specific selections may vary with the individual instructor.

**ENLT 121** Staff
**(C)Introduction to Poetry** 3 credits
*Formerly ENGL 103*

An exploration of the nature of poetry, its value, aims, and techniques. The emphasis will be critical rather than historical. The range of poems and the specific selections may vary with the individual instructor.

**ENLT 122** Staff
**(C)Introduction to Drama** 3 credits
*Formerly ENGL 104*

An exploration of the nature of drama, its types, techniques, and conventions. The emphasis will be critical rather than historical. The range of plays and the specific selections may vary with the individual instructor. This course may be counted toward the Theatre minor.

**ENLT 123** Dr. Jordan
**Masterworks of Western Civilization** 3 credits
*Formerly ENGL 119*

Study of masterpieces of literature from the Hebrew Old Testament and classic Greek to the modern European, illuminating the development of Western civilization.

**ENLT 125** Dr. Gougeon
**(C)Classic American Stories** 3 credits
*Formerly ENGL 122*

As an introduction to the American short story, this course will examine representative examples of the genre from the 19th century to the present. Emphasis will be placed on the significance of individual works, but some consideration will be given to the evolving American milieu. Authors such as Hawthorne, Poe, Crane, Malamud, and Oates will be considered.

**ENLT 126** Dr. Whittaker
**(C,D)Introduction to Irish Culture** 3 credits
*Formerly ENGL 133*

An exploration of Irish culture by means of the island's major works of mythology, history, religion, folk story, fairy tale, song, verse, drama and fiction. All readings in English.

**ENLT 127** Dr. Jordan
**(C)Myth of the Hero** 3 credits
*Formerly ENGL 121*
Mythic materials are examined to discover the underlying heroic archetypal patterns. Then modern literature is examined in the light of the same mythic patterns.

**ENLT 140** Staff
**(C)English Inquiry** 3 credits
*Formerly ENGL 140*
An exploration of fiction, poetry, and drama. The approach is inductive; the aims are a greater understanding of literature, and an introduction to techniques of literary scholarship, theory, and research.

**Note: All 200-level ENLT courses have a prerequisite of ENLT 140 or equilvalent.**

**ENLT 210** Prof. Hill
**(C)Modern Poetry** 3 credits
*Formerly ENGL 221*
Prerequisite: ENLT 140 or equivalent; previous study of poetry. Modern poets ranging from Yeats and Hopkins to Plath and Hughes are examined. Major emphasis is placed on close critical readings of representative works.

**ENLT 211** Dr. McInerney
**(C)Dramatic Comedy** 3 credits
*Formerly ENGL 223*
Principles, modes, tactics used in dramatic comedy. The plays of writers ranging from Shakespeare to Neil Simon, as well as several films, will be analyzed as models. Opportunity for student writing of comedy. This course may be counted toward the Theatre track or minor.

**ENLT 212** Dr. Gougeon
**Masters of Darkness** 3 credits
*Formerly ENGL 330*
This course will survey a significant sampling of the short works of three of America's most famous "dark Romantic" writers: Melville, Hawthorne, and Poe. Consideration will be given to the historical milieu and the authors' responses to the problems and promises of the American experience.

**ENLT 213** Dr. Passon
**(C)Introduction to Satire** 3 credits
*Formerly ENGL 320*
An exploration of the historical, critical, and conceptual nature of satire, including established satirical conventions and techniques. Representative examples in fiction, drama, and poetry from a variety of literary periods will be considered. Special emphasis will, however, be placed on British literature of the Restoration and eighteenth century, the Age of Satire. Though the course will focus on satirical literature, examples of satire from other media will be sampled.

**ENLT 214** Dr. Fraustino
**Macabre Masterpieces** 3 credits
*Formerly ENGL 321*
This course studies works of horror-or Gothic-fiction in England and America that best exemplify this mode of writing as a serious art form in its exploration of the human mind, particularly abnormal psychology. Works we will read may include: Mary Shelley's *Frankenstein*, Robert Louis Stevenson's *Dr. Jekyll and Mr. Hyde*, Joseph Conrad's *Heart of Darkness*, Bram Stoker's *Dracula*, the works of Edgar Allan Poe, and others.

**ENLT 215** Dr. Fraustino
**(C)Literature of the Absurd** 3 credits
*Formerly ENGL 421*
Focusing on literature from 1850 to the present, this course will examine works of fiction, drama, and to some extent poetry that reflect a general 19th- and 20th-century western sense of disintegrating values and lost religious beliefs. Readings will include works by Edgar Allan Poe, Lord Byron, Thomas Hardy, Robert Louis Stevenson, Joseph Conrad, Tennessee Williams, Ernest Hemingway, and Samuel Beckett.

**ENLT 220** Dr. Friedman
**(C)Shakespeare** 3 credits
*Formerly ENGL 134*
An introduction to the works of William Shakespeare, including forays into each of the major dramatic genres (comedy, tragedy, history, and romance). Consideration will be given to the biographical and cultural contexts which helped to determine the reception and impact of individual works. This course may be counted toward the Theatre track or minor.

**ENLT 221** Dr. Whittaker
**(W)Woody Allen** 3 credits
*Formerly ENGL 231*
This course examines the films, the published screenplays, the volumes of short prose, and assorted interviews and articles. We will examine some of Woody Allen's sources, such as Plato, Shakespeare, Joyce, and Bergman. Our approach will be historical and analytical.

**ENLT 222** Dr. Engel
**(C,D,W)Graham Greene's Travellers** 3 credits
*Formerly ENGL 284*
A study of selected writings by Greene, focusing on the journeys made by protagonists who venture beyond the relative comfort of their life at home to the disorienting challenges of life in the developing and post-colonial worlds. An exploration of Greene's use of historical, religious and political unrest in Africa, Latin America, Haiti, and French Indo-China to move his protagonists from a position of aloofness from the world to one of commitment to its needs. Parallel to this exploration will be an examination of Greene's use of the cultural dislocation his characters experience to provoke a discovery of the self and a renewed discovery of the worlds in which the self develops.

**ENLT 225** Dr. Whittaker
**(C,D,W) Writing Women** 3 credits
(Theory Intensive)
*Formerly ENGL 225*
In this course we will survey the issues raised in Virginia Woolf's *A Room of One's Own* and Carolyn G. Heilbrun's *Writing a Woman's Life*. We will discuss theoretical and practical essays incorporating British Marxist Feminism, French Psychoanalytic Feminism, and American Traditional Feminism. By the light of these approaches we will read short selections of fiction and poetry from Sappho to Willa Cather and Adrienne Rich.

**ENLT 226** Dr. Casey
**(C,D)Novels by Women** 3 credits
*Formerly ENGL 235*
A study of novels by and about women, including such authors as Austen, Bronte, Eliot, Chopin, Woolf, Lessing, Byatt, and Morrison. The aim is to expand students' knowledge of the novel's history and development and their understanding of women's experiences as expressed by women writers.

**ENLT 227** Dr. DeRitter
**(C,D,W)Frankenstein's Forebears** 3 credits
*Formerly ENGL 227*
An interdisciplinary exploration of the lives and works of one of England's most fascinating literary families. William Godwin was an anarchist philosopher and novelist; Mary Wollstonecraft was a feminist, memoirist, and novelist; their daughter, Mary Shelley, is best known as the author of *Frankenstein*, while her husband, Percy Bysshe Shelley, was a well-known poet and political radical in his own right.

**ENLT 228** Dr. DeRitter
**(C,D,W)Race in Anglo-American Culture, 1600-1860** 3 credits
(Theory Intensive)
*Formerly ENGL 317*
This course will examine Anglo-American portrayals of African- and Native American peoples in the early modern era. We will study works from both high culture (poems, plays, and novels) and low culture (Indian captivity narratives, frontier biographies, slave autobiographies). The reading list will include writers such as Hakluyt, Rowlandson, Dryden, Behn, Cooper, Melville, Longfellow, Sedgwick, Douglass, and Stowe.

**ENLT 229** Prof. Schaffer
**(C,D) The Cross-Cultural Novella** 3 credits
*Formerly ENGL 351*
This course aims both to foster an understanding and appreciation of the novella as a distinct literary form combining the short story's unique focus on character and closed plot structure with the novel's broader treatment of time and place and to introduce the student to the literature of a variety of continents and cultures. The course will deal with writers such as Tolstoy, Flaubert, Kafka, Kawabata, Mann, and Gaines.

**ENLT 230** Dr. Gougeon
**(C)American Romanticism** 3 credits
(Area D) *Formerly ENGL 324*
This course will deal with representative short works of America's six major Romantic authors: Emerson, Thoreau, Whitman, Hawthorne, Melville, and Poe.

**ENLT 234** Dr. Beal
**(C,W)Camelot Legend** 3 credits
(Area A) *Formerly ENGL 219*
This course will examine the development of Arthurian legend-tales of knights and ladies associated with the court of King Arthur-from its early origins in Celtic and Latin medieval literature, through medieval romances and histories, culminating in Malory's *Morte D'Arthur*.

**ENLT 235** Dr. Beal
**(C,W)Literature in the Age of Chaucer** 3 credits
(Area A) *Formerly ENGL 165*
This course will explore 14th-century non-dramatic vernacular literature. In addition to Chaucer, authors studied may include Langland, Kempe, and the Pearl Poet.

**ENLT 238** Dr. Fraustino
**(C)British Romantic Poets** 3 credits
(Area C) *Formerly ENGL 372*
This course surveys the major British Romantic poets within their historical and intellectual context. It proceeds chronologically, beginning with William Blake and concluding with John Keats. Through close textual analysis and in-class discussion of major poems, students should develop an appreciation and understanding of the literature of the period.

**ENLT 239** Dr. Whittaker
**(C,D,W)Irish Short Story** 3 credits
(Area E) *Formerly ENGL 334*
Introduces American students to the variety and richness of the short story from the pens of such masters as Yeats, Joyce, Frank O'Connor, McGovern, Jordan, Trevor, Beckett and others. Serious craftsmen aware of the verbal tradition, shapers of the Literary Revival, these masters of language forge a literature that affirms spiritual values in the midst of material misery.

**ENLT 240** Drs. Beal, Friedman
**British Literature: Medieval & Renaissance** 3 credits
(Area A) *Formerly ENGL 164*
A detailed study of representative works and authors from the Anglo-Saxons to the 17th century. Though the emphasis will be on an intensive study of major works in their literary and cultural context, consideration will be given to minor writers as well.

**ENLT 241** Dr. DeRitter
**British Literature: Restoration & 18th Century** 3 credits
(Area B) *Formerly ENGL 244*
Study in depth of the major works of such authors as Dryden, Pope, Swift, Boswell, and Johnson, among others. Due attention will be given to critical analysis, literary research, and historical, social, and political background.

**ENLT 242** Drs. Casey, Fraustino
**British Literature: Romantic & Victorian** 3 credits
(Area C) *Formerly ENGL 264*
A study of the major literary works in 19th-century England: poetry, novels and non-fictional prose. The emphasis is threefold: critical analysis; literary history; social, intellectual and political background.

**ENLT 243** Dr. Gougeon, Fr. Quinn
**American Literature to 1865** 3 credits
(Area D) *Formerly ENGL 344*
An in-depth study of a select group of major American authors from the Colonial Period to the Civil War. Included are Bradford, Franklin, Irving, and Poe. Consideration given to the historical and cultural milieu and development of major American themes and attitudes.

**ENLT 244** Drs. Engel, Whittaker
**Modern British Literature** 3 credits
(Area E) *Formerly ENGL 364*
Selected modern and postmodern English poets, playwrights, and fiction writers: Hopkins, Eliot, Hughes, Auden, Larkin, Spender, Osborne, Stoppard, Pinter, Greene, Waugh, Read, Lodge, Amis, Spark, McEwan and Chatwin.

**ENLT 245** Drs. Whittaker, Gougeon
**American Literature, 1865 to the Present** 3 credits
(Area F) *Formerly ENGL 444*
Study of a select group of major American authors from the Civil War to the present. Included are Twain, Crane, Fitzgerald and Vonnegut. The historical and cultural milieu and the development of major American themes and attitudes are reviewed.

**ENLT 295** Dr. Friedman
**(C)Shakespeare in Stratford** 3 credits
*Formerly ENGL 295*
This course combines a traditional study of six Shakespearean plays on the University campus with a week-long residency at the Shakespeare Centre in Stratford-upon-Avon, England. Students will read and discuss the plays produced during the current Royal Shakespeare Company season and attend performances of those plays.

**Note: All 300-level ENLT courses have a prerequisite of ENLT 140 or equivalent; a 200-level ENLT course is strongly recommended.**

**ENLT 340** Dr. Beal
**Introduction to** 3 credits
**Late Medieval Drama**
(Area A) *Formerly ENGL 226*
An introduction to the drama which flourished in the late 14th and 15th centuries: the Corpus Christi cycle, morality plays such as *Everyman*, *Mankind*, and *Castle of Perseverence*, and the saint's play. (Individual plays studied will change from year to year.) This course may be counted toward the Theatre track or minor.

**ENLT 341** Dr. Friedman
**(C,W) Shakespeare:** 3 credits
**Special Topics**
(Theory Intensive) *Formerly ENGL 335*
A detailed study of Shakespeare's treatment of either a particular genre (comedy, tragedy, history, romance) or a particular subject that occurs across genres. Special attention will be paid to the meaning of plays in performance. This course may be counted toward the Theatre track or minor.

**ENLT 342** Staff
**Renaissance Poetry & Prose** 3 credits
*Formerly ENGL 323*
Detailed study and discussion of several varieties of English literature written between the time of Sir Thomas More and John Milton. Lyric and narrative poetry, fictional and non-fictional prose, and drama will be included in course readings, discussions, and assignments. Typical authors covered include More, Surrey, Lyly, Spenser, Sir Philip and Mary Sidney, Donne, Webster, Jonson, Marvell, and Milton.

**ENLT 343** Staff
**Milton & 17th-century** 3 credits
**Poetry** *Formerly ENGL 139*
Studying the poetry of John Milton, "a major figure," the Metaphysical poets, and the Cavalier poets ought to bring the student to a reputable understanding of the late English renaissance. The 17th century is a vital era for those wishing to understand the results of the Elizabethan Age and the onrush of Restoration and 18th-century poets.

**ENLT 344** Dr. DeRitter
**Milton's Paradise Lost** 3 credits
*Formerly ENGL 318*
Intensive study of Milton's masterpiece. In addition to our reading and discussion of the text itself, we will examine its biographical and historical context and explore a variety of critical approaches to the poem.

**ENLT 345** Dr. DeRitter
**Restoration** 3 credits
**& 18th-century Drama**
(Area B) *Formerly ENGL 245*
An examination of the major developments in comedy, tragedy, and experimental dramatic forms on the English public stage between 1660 and approximately 1775. Discussions will focus frequently on the social, political and institutional changes which altered the ways in which theatre was produced during the period. The reading list will include works by Wycherley, Behn, Dryden, Otway, Congreve, Rowe, Addison, Steel, Gay, Lillo, Fielding, Goldsmith, and Sheridan. This course may be counted toward the Theatre track or minor.

**ENLT 346** Dr. Casey
**The English Novel:** 3 credits
**18th & 19th Centuries**
*Formerly ENGL 319*
The history of the English novel from its origins in the early 18th century until the end of the 19th century. The course focuses on such major figures as Defoe, Richardson, Fielding, Austen, Dickens and Eliot.

**ENLT 347** Dr. Casey
**Victorian Voices** 3 credits
*Formerly ENGL 371*
This course will focus on three major Victorian authors: one non-fiction prose writer, one novelist, and one poet. Possible authors include Carlyle, Arnold, Ruskin, Dickens, Eliot, Bronte, Tennyson, Browning, Rossetti.

**ENLT 348** Prof. Hill
**(C,D,W)Colonial &** 3 credits
**Postcolonial Fiction**
*Formerly ENGL 322*
This course explores myths and meanings of 19th- and 20th-century European colonialism in Asia, Africa, and the Americas by representative authors such as Achebe, Conrad, Forster, Kincaid, Kipling, Naipaul, Orwell, Rushdie, and others.

**ENLT 350** Dr. Gougeon
**Major Works:** 3 credits
**American Romantics**
(Area D) *Formerly ENGL 325*
Cooper's *The Prairie*, Emerson's *Nature*, Thoreau's *Walden*, Melville's *Moby Dick*, and others. Evaluation of the works in their historical context and the development of the American Romantic movement, 1820-1865.

**ENLT 351** Fr. Quinn
**Transcendentalists** 3 credits
*Formerly ENGL 326*
This course transcends the typical limits of this literary period to Emerson and Thoreau's major works. Thus, Orestes Brownson, Margaret Fuller, Ellery Channing, Theodore Parker are covered.

**ENLT 352** Dr. Gougeon
**The Development of** 3 credits
**the American Novel**
*Formerly ENGL 333*
This course will deal with representative novels produced in America from the late 18th to the 20th century. The course will focus on the novel as representative of changing literary and cultural values throughout the period. Authors considered will include Charles Brockden Brown, Nathaniel Hawthorne, Mark Twain, Kate Chopin, John Steinbeck, and Kurt Vonnegut, Jr.

**ENLT 353** Dr. Gougeon
**Major Works:** 3 credits
**American Realists**
(Area F) *Formerly ENGL 425*
Twain's *Huckleberry Finn*, Howell's *The Rise of Silas Lapham*, James's *The American*, Crane's *The Red Badge of Courage*, Dreiser's *Sister Carrie* and others. Works are evaluated in their historical milieu and the development of American Realism, 1865-1900.

**ENLT 354** Fr. Quinn
**Major Works of** 3 credits
**Twain & James** *Formerly ENGL 331*
Works to be studied include Twain's *Huckleberry Finn* and *A Connecticut Yankee in King Arthur's Court*, and James's *Portrait of a Lady* and *The Ambassadors*. These works will be examined both in terms of their historical context and by way of a comparative analysis of the two authors.

**ENLT 355** Dr. McInerney
**American Drama 1919-1939** 3 credits
(Area F) *Formerly ENGL 427*
A review of the first "golden age" of American drama, which includes biting masterpieces such as *The Hairy Ape*, *Awake and Sing*, and comic works such as *You Can't Take It With You* and *The Time of Your Life*. This course may be counted toward the Theatre track or minor.

**ENLT 356** Fr. Quinn
**Major Works** 3 credits
**of Hemingway & O'Hara**
*Formerly ENGL 332*
Works to be studied include Hemingway's *The Sun Also Rises* and *For Whom the Bell Tolls*, and O'Hara's *Appointment in Samarra* and *From the Terrace*. These will be examined both in terms of their historical context and basic themes, and by way of a comparative analysis of the two authors. We will also investigate how certain authors either become or do not become academically and critically acceptable.

**ENLT 360** Prof. Schaffer
**(D)Introduction to** 3 credits
**Jewish Literature**
*Formerly ENGL 329*
The course provides a broad literary overview of Jewish life from medieval times to the present, examining the poetry, fiction, memoirs, and drama of Jewish writers from a variety of cultures.

**ENLT 361** Dr.Whittaker
**Modern Irish Novel** 3 credits
(Area E) *Formerly ENGL 336*
A selective introductory course to Ireland's renowned modern novelists: Francis Smart, John McGahern, William Trevor, Neil Jordan, Brian Moore, Bernard MacLaverty, John Banville and others. These literary artists capture the verve, flavor, and illumination that distinguish today's Irish novels.

**ENLT 362** Dr. Whittaker
**Literature & Philosophy** 3 credits
*Formerly ENGL 232*
This course explores the Platonic insight that on the highest level literature and philosophy converge. We begin with a few of Plato's dialogues which develop this idea. Then we examine several "literary" works in English which embody it. Our approach is analytical, inductive and historical.

**ENLT 363** Dr.Whittaker
**Magazine Editing** 3 credits
*Formerly ENGL 311*
The process of editing is surveyed. Macro-editing (publishing for a defined audience and delighting, surprising, informing, and challenging it) is emphasized over micro-editing (grammar, punctuation, and so forth). Both are fitted into the larger picture of promotion, fulfillment, circulation, advertising, production, and distribution.

**ENLT 364** Dr.Engel
**Modern Novel** 3 credits
*Formerly ENGL 419*
The evolution of the novel from modern to postmodern times. Major American and English writers are studied, moving from traditional narrative to self-conscious stylistic devices.

**ENLT 365** Dr. Fraustino
**Comparative Romanticism** 3 credits
*Formerly ENGL 420*
Major British and American Romantic writers will be studied in an effort to distinguish the forms Romanticism takes in the two countries and to determine possible relationships. Authors to be examined include Blake, Wordsworth, Coleridge, Shelley, Keats, Hawthorne, Poe, Emerson, and Whitman.

**ENLT 366** Dr. Beal
**Dante's *Divine Comedy*** 3 credits
*Formerly ENGL 431*
A canto-by-canto study, in translation, of Dante's dream vision of hell, purgatory, and heaven. Consideration will be given to the cultural milieu and to medieval art and thought as these affect the allegorical meaning and structure of the poem.

**ENLT 367** Dr. Jordan
**Gerard Manley Hopkins, S. J.** 3 credits
*Formerly ENGL 436*
Gerard Manley Hopkins, the only priest-poet ever to be honored with a place in Westminster Abbey's Poet's corner, will be studied in his literary and Jesuit contexts as a nature, Victorian, religious, original, theological, meditative, and modern poet.

**ENLT 368** Prof. Hill
**Conrad's Fiction** 3 credits
*Formerly ENGL 437*
A reading of major works by Conrad and survey of critical response to this quintessential modern Western writer.

**ENLT 382-383** Staff
**Guided Independent** (variable credit)
**Study** *Formerly ENGL 382-383*
A tutorial program open to third-year students. Content determined by mentor.

**ENLT 395** Dr.Whittaker
**Travel Seminar: Ireland** 3 credits
*Formerly ENGL 395*
This is an artistic, cultural, literary tour. Students will study the people and places that contribute to Ireland's distinct place in the world of literary art. (Intersession or Spring Break)

**Note: All 400-level ENLT courses have a prerequisite of ENLT 140 or equivalent; a 300-level ENLT course is strongly recommended.**

**ENLT 443** Dr. Beal
**Chaucer** 3 credits
*Formerly ENGL 432*
A study of Chaucer's poetry in the context of medieval culture. Readings and assignments will concentrate on *The Canterbury Tales*, but will also cover the other major poems, such as the *Book of the Duchess* and the *Parliament of Birds*.

**ENLT 447** Dr. Fraustino
**Keats: Death & Love** 3 credits
*Formerly ENGL 434*
This course will focus almost exclusively on one writer, John Keats, and explore the dynamic relationship in his poetry between death and love.

**ENLT 455** Fr. Quinn
**American Realists** 3 credits
(Area F) *Formerly ENGL 424*
Study of representative figures in the post-Civil War period, the period of the rise of American realism. Authors treated will be Mark Twain, Henry James, Stephen Crane, and selected modern authors.

**ENLT 458** Dr. Whittaker
**Joyce** 3 credits
*Formerly ENGL 438*
This course explores the prose works of James Joyce, one of the lights of Anglo-Irish writing, and a major figure in 20th-century literature. We will read and discuss *Dubliners*, *A Portrait of the Artist as a Young Man*, and, with the help of various guides, the masterpiece, *Ulysses*. We will work to apprehend in Joyce both the universal and the peculiarly Irish.

**ENLT 461** Dr. McInerney
**Modern Drama** 3 credits
*Formerly ENGL 422*
Prerequisite: in addition to ENLT 140 and 300-level ENLT course, some previous study of drama. A detailed introduction to the major trends and authors in 20th-century British and American drama, with some Irish and Continental works included. Readings and assignments will focus on major figures such as Shaw, O'Neill, Miller, Williams. This course may be counted toward the Theatre track or minor.

**ENLT 462** Staff
**Literary Criticism & Theory** 3 credits
(Theory Intensive)
*Formerly ENGL 464*
This course analyzes the derivation and methodology of the theories underlying contemporary practice. For historical perspective, we turn to Plato and Aristotle, and then to a survey of other major Classical, Renaissance, Enlightenment, and 19th-century sources. Thence we examine 20th-century critical theories, namely psychoanalysis, Marxism, feminism, formalism (New Criticism), reader response, structuralism, deconstruction, and cultural materialism (New Historicism).

**ENLT 470** Dr. Rakauskas
**Teaching Modern Grammars** 3 credits
*Formerly ENGL 460*
This course is designed to provide an understanding of the English language and its grammar, based upon recent linguistic analysis of the language, and to assist the future teacher in his or her understanding of transformational / generative grammar and its place in the curriculum. Techniques for teaching these new grammars, and laboratory teaching experience in the first-year writing clinic will be presented.

**ENLT 480** Staff
**Internship** (variable credit)
*Formerly ENGL 480*
English majors can receive internship credit for a variety of on-the-job work experiences. Approval must be obtained beforehand from chairperson and dean.

**ENLT 482-483** Staff
**Guided Independent** (variable credit)
**Study** *Formerly ENGL 482-483*
A tutorial program open to fourth-year students. Content determined by mentor.

**ENLT 490-491** Staff
**(W)Senior Seminar** 3 credits
The topics of these writing-intensive seminars vary from semester to semester. Based largely on student writing, presentations, and discussion, this capstone course is required in the major and culminates in the student's development of a seminar paper. May be repeated for credit. Enrollment limited to 15 students per section.

Single letters preceding course titles identify courses which meet university General Education requirements for Culture, Diversity, or Writing Intensive credits. (Theory) and (Area) citations refer to the requirements for the English major (see above).

# THEATRE

*DR. JOAN ROBBINS, Program Director*

As a major existing within the English Department, Theatre offers a broad-based liberal arts degree for the theatre generalist. The Theatre major prepares the student for further, more focused training in the theatrical arts through a wide variety of courses in performance arts, technical theatre, design arts, directing, theatre history, playwriting and dramatic literature. Students may focus their programs of study to some degree toward specific interests in these areas of theatre through the use of electives within the major.

Theatre majors are strongly encouraged to complete either a minor (perhaps in English or Writing) or a second major (perhaps in English). Other combinations are possible.

Theatre majors are required to participate in University Players productions; Theatre minors are strongly encouraged to do so. All students with an interest in theatre, whatever their major, are invited to participate in University Players productions. (See also "Theatre" under Extracurricular Activities.)

Students majoring in Theatre are required to take three introductory courses in Theatre, Acting, and Technical Theatre (THTR 110, 111, 112), two Theatre History courses (THTR 211, 212), Design for the Theatre (THTR 213), Directing I (THTR 311), and five credits of Production Laboratory (THTR 280, 380). Four elective courses in Theatre round out the major. Introduction to Drama (ENGL 104), and at least one other course in Dramatic Literature are required in the student's cognate area. Courses which would satisfy the Dramatic Literature requirement include ENGL 134, 222, 223, 226, 245, 295, 335, 384, 427.

**THTR 110** Dr. Robbins
**(CL)Introduction to Theatre** 3 credits
An introduction to the theories and practices of the theatre arts. Dramatic structure, dramatic literature, critical writing, acting, directing, design, practical stagecraft, and some theatre history will all be touched on in an effort to introduce students to the fullness and variety of the art of theatre.

**THTR 111** Prof. O'Steen
**(CA)Introduction to Acting** 3 credits
This first course in a three-course sequence is intended as an introduction to the development and training of the actor, covering the fundamental elements of the actor's craft, including internal and external technique, character analysis, and vocal/physical warmups. These elements will be practically applied in various in-class exercises and rehearsed performance work. The subject of auditions will also be covered.

**THTR 112** Prof. O'Steen
**Introduction to Technical Theatre** 4 credits
A study of materials, equipment, and techniques used in the construction and finishing of scenery. Also includes principles of lighting and sound and special effects for the stage. Forty hours of lab work in one of the following areas: scenery, costumes, lighting, or props; and participation on a crew for a major University Players' production will be required.

**THTR 120** Staff
**(CA)Creative Drama and Youth Theatre** 3 credits
An introduction to the history, theory, and practice of both theatre for youth and creative drama in the United States. Representative plays will be read and productions attended and reviewed. The course will explore various applications of creative drama techniques, including their use in rehearsal and in the classroom.

# THEATRE

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **SPRING** |
| MAJOR | THTR 110-111 | Intro. Theatre-Intro. Acting | 3 | 3 |
| MAJOR | THTR 112 | Intro. Tech. Theatre | 4 | |
| COGNATE | ENLT 122 | Intro. Drama | | 3 |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE C/IL | C/IL102 | Computing and Information Literacy | 3 | |
| GE QUAN | QUAN ELECT | Quantitative Reasoning Elective | | 3 |
| GE PHIL-T/RS | PHIL 120-T/RS 121 | Intro. to Philosophy-Theology I | 3 | 3 |
| GE FSEM-PHED | INTD 100-PHED ELECT | Freshman Seminar-Physical Education | 1 | 1 |
| | | | **17** | **16** |
| | | **SECOND YEAR** | | |
| MAJOR | THTR 211-212 | Theatre History I & II | 3 | 3 |
| MAJOR | THTR 213 | Design for the Theatre | | 3 |
| MAJOR | THTR 280 | Production Laboratory | 1 | |
| COGNATE | COGNATE ELECT[2] | Elective-Dramatic Literature | 3 | |
| GE S/BH | S/BH ELECT | Social-Behavioral Elective | 3 | |
| GE PHIL-T/RS | PHIL 210-T/RS 122 | Ethics-Theology II | 3 | 3 |
| GE NSCI | NSCI ELECT | Natural Science Elective | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **17** | **16** |
| | | **THIRD YEAR** | | |
| MAJOR | THTR 311 | Directing I | | 3 |
| MAJOR | THTR ELECT[1] | Electives | 3 | 3 |
| MAJOR | THTR 280 | Production Laboratory | 1 | 1 |
| COGNATE | COGNATE ELECT[2] | Elective | 6 | 3 |
| GE PHIL OR T/RS | PHIL OR T/RS | Elective | 3 | |
| GE S/BH | S/BH ELECT | Social-Behavioral Elective | | 3 |
| GE ELECT | ELECT | Free Elective | 3 | 3 |
| | | | **16** | **16** |
| | | **FOURTH YEAR** | | |
| MAJOR | THTR ELECT | Electives | 3 | 3 |
| MAJOR | THTR 280 | Production Laboratory | 1 | 1 |
| COGNATE | ELECT | Cognate Elective | 3 | 6 |
| GE ELECT | ELECT | Free Elective | 6 | 6 |
| GE HUMN | HUMN ELECT | Humanities Elective | 3 | |
| | | | **16** | 16 |

**Total: 130 CREDITS**

[1] Major electives: the Theatre major must select four electives from the following: any THTR course at the 200 level or higher; WRTG 215, WRTG 315, and ENLT courses 200 level or higher that qualify as dramatic literature courses.
[2] Cognate electives must include two courses in dramatic literature; one of these must be ENLT 122.

**THTR 210** Dr. Robbins
**Intermediate Acting** 3 credits
(Prerequisite: THTR 111 with a grade of B- or higher) This second in a three-course sequence builds on the fundamentals of the acting process and focuses on further exploration of internal acting technique. Stanislavski-based and/or other modern and contemporary acting systems are explored through exercises, written analysis, and scene/monologue study. There is an emphasis on ensemble acting in the classroom, rehearsal, and production.

**THTR 211** Dr. Robbins
**(CL)Theatre History I** 3 credits
A chronological study of western theatre from ancient Greek drama to seventeenth-century British drama. A selection of plays from representative playwrights will be read and discussed with an emphasis on the social, cultural, and theatrical contexts within which these playwrights lived and worked.

**THTR 212** Dr. Robbins
**(CL)Theatre History II** 3 credits
A chronological study of western theatre from seventeenth century French and Spanish, through Restoration and eighteenth-century British drama, up to nineteenth-century German, Scandinavian, and Russian drama. A selection of plays from representative playwrights will be read and discussed, with an emphasis on the social, cultural, and theatrical contexts within which these playwrights lived and worked.

**THTR 213** Prof. Larsen
**(CA)Design for the Theatre** 3 credits
(Prerequisite: THTR 112 with a grade of B- or higher) An introduction to the various design and production elements in theatre. Scenery, lighting, costumes, projections, props and sound will be explored. Students participate in the design elements of the University productions.

**THTR 214** Prof. Larsen
**Drama Practicum** 3 credits
(Prerequisite: any other course that may be counted in the Theatre minor) Work on one of the major aspects of producing a play: acting, costuming, set construction, lighting, publicity, and box-office management.

**THTR 280** Prof. Larsen
**Production Laboratory** 1 credit
This course is designed to provide the Theatre major practical experience in technical theatre through a variety of production-related jobs including, but not limited to, props master, master electrician, sound designer, assistant technical director, assistant stage manager, and running crew. Students must do a minimum of 40 hours of production work and complete the assigned tasks on deadline to receive credit. May be taken for credit up to five times.

**THTR 310** Dr. Robbins
**Theories of Theatre** 3 credits
Students will study the theories of theatre advanced in the writing of Diderot, Archer, Stanislavsky, Vakhtangov, Brecht, Copeau, Artaud, Grotowski, Brook, and Schechner.

**THTR 311** Prof. O'Steen
**Directing I** 3 credits
(Prererequisite: THTR 111 with a grade of B- or higher or permission of instructor) An introduction to the basic mechanics of stage directing with an emphasis on the tools needed to approach the staging of a play, such as playscript analysis, interpretive skills, organizational skills, communication and leadership skills, developing a ground-plan, blocking, and composition/picturization. Several plays will be read and analyzed. Student directors will select, cast, and direct a short scene for performance.

**THTR 313** Prof. Larsen
**Set Design for the Theatre** 3 credits
(Prerequisite: THTR 213 with a grade of B- or higher) An exploration of the basic crafts of the theatrical set designer. Concentration on developing one's personal vision and interpretive skills through script analysis. Practice in sketching, drafting, painting, collage, model making and typical stage construction. Introduction to environmental theatre.

**THTR 370** Prof. Larsen
**Technical Theatre:** 3 credits
**Special Topics**
Topic and prerequisites will be announced prior to preregistration.

**THTR 371** Prof. Larsen
**Theatre Design:** 3 credits
**Special Topics**
Topic and prerequisites will be announced prior to preregistration.

**THTR 372** Dr. Robbins
**Dramatic Literature:** 3 credits
**Special Topics**
Topic and prerequisites will be announced prior to preregistration.

**THTR 373** Prof. O'Steen
**Acting: Special Topics** 3 credits
(Prerequisite: THTR 111) Topic and prerequisites will be announced prior to preregistration.

**THTR 380** Staff
**Advanced Production Lab** 2 credits
(Prerequisite: permission of the instructor and typically 2 credits of THTR 280 with a grade of B- or higher) *May be taken only once.* This course is designed to offer the advanced student practical experience in a variety of production-related work including, but not limited to, stage management, theatre design, directing, dramaturgy, playwriting, or performance of a major role (as determined by the faculty) in the University Players Mainstage Season. Students must do a minimum of 80 hours of production work and complete the assigned tasks on deadline to receive credit.

**THTR 382-383, 482-483** Staff
**Independent Study in Theatre** 3 credits
A tutorial program open to junior and senior students who have completed appropriate lower-division coursework.

**THTR 410** Staff
**Advanced Acting** 3 credits
(Prerequisite: THTR 210 with a grade of B- or higher) This final course in the three-course acting sequence focuses on external acting techniques. There is an exploration of physical characterization and the use of the actor's body to achieve this physical transformation. This work builds on the student's self-knowledge and experience with internal technique through the use of exercises, written analysis, and scene/monologue study.

**THTR 411** Staff
**Directing II** 3 credits
(Prerequisite: THTR 311 with a grade of B- or higher or permission of instructor) Building on techniques and skills learned in Directing I, this course concentrates primarily on the development of the young director's style by focusing on the development of a production concept and studying various rehearsal techniques, directing methods, directing styles. Methods of coaching actors and development of the director-actor relationship are also covered. Practical application of course work through direction of a 20-30 minute one-act or cutting for public performance in the Director's Workshop as part of the University Players Studio Season.

**THTR 480** Staff
**Internship** Variable credit
Theatre majors or minors can receive credits for a variety of on-the-job work experience. Approval must be obtained beforehand from the supervising faculty member, chairperson, and dean.

# WRITING

All Writing courses have WRTG 107 (or equivalent) as prerequisite. Students who take WRTG 105-106 may not take WRTG 107.

**WRTG 104** Staff
**Written Communication** 3 credits
(Formerly ENGL 105) An introduction to non-expository forms of writing. This course does not count toward the Writing Track or the Writing minor.

**WRTG 105** Staff
**College Writing I** 3 credits
(Placement into 105 required) This course offers instruction in structuring argumentative essays and concentrates on defining and focusing problems, creating arguments, and providing evidence in academic essays. This course is the first of a two-semester sequence (WRTG 105 and 106). It does not count toward the Writing Track or the Writing minor. *Photocopying Fee.*

**WRTG 106** Staff
**(D)College Writing II** 3 credits
(Prerequisite: WRTG 105) This course continues instruction in structuring argumentative essays, reviews the work in WRTG 105, and concentrates on providing support for arguments and elements of style and grammar. This course is the second semester of a two-semester sequence (WRTG 105-106). The sequence fulfills the General-Education Writing Requirement and receives one course credit for cultural diversity. This course does not count toward the Writing Track or the Writing minor. *Photocopying Fee.*

**WRTG 107** Staff
**Composition** 3 credits
(Formerly ENGL 107) A study of expository and argumentative prose, and the processes and techniques effective writers use. Classical rhetorical strategies, a variety of grammatical and theoretical approaches, and (often) computer programs are employed to help students understand composition as a means of communication and as a mind-shaping discipline in the liberal-arts tradition. This course does not count toward the Writing Track or the Writing minor; it may not be taken by students who have completed WRTG 105-106. *Photocopying Fee.*

**WRTG 210** Dr. Rakauskas, Prof. Hill
**Advanced Composition** 3 credits
The purpose of this course is to review, practice and apply the principles of a rhetoric of order, stressing invention, disposition, style, tone and theme.

**WRTG 211** Dr. Fraustino
**Technical and Business Writing** 3 credits
A course in scientific or technical writing designed to help students improve their writing skills in preparation for their professions. Specialized training is offered in writing of proposals, reports, instructions, letters, abstracts, resumes, etc.

**WRTG 212** Dr. McInerney
**Writing for the Law** 3 credits
This course aims to help the student develop the writing skills that will be of particular value to prospective lawyers. Readings, exercises, and assignments stress precision and conciseness as well as careful argument. The course should also be valuable to any student who wants to improve his/her analytical ability and expressive capacity. *Photocopying Fee.*

**WRTG 213** Prof. Schaffer
**Fiction Writing I** 3 credits
Designed to increase students' skills in writing short prose fiction, this course augments frequent practice in the genre with attention both to theories of short-story composition and to diverse examples. In a workshop atmosphere, students will read and discuss one another's work as well as fiction by well-known authors. *Photocopying Fee.*

**WRTG 214** Staff
**Nonfiction Writing I** 3 credits
Designed to develop skills in writing creative nonfiction prose, this course employs a workshop format and requires intensive reading and analysis of student work as well as work by noted practitioners such as Orwell, Baldwin, Didion, and Dillard. *Photocopying Fee.*

**WRTG 215** Dr. Robbins
**Play Writing I** 3 credits
This course is designed to teach students the craft and technique of writing a play. The students will explore their own abilities through play writing and will be responsible for writing a full one-act play or one act of a two- or three-act play. This course may be counted toward the Theatre Track, major or minor. *Photocopying Fee.*

**WRTG 216** Prof. Hill
**Poetry Writing I** 3 credits
Theory and practice of writing poetry with attention to modern and contemporary tradition and criticism. Opportunity for sustained, serious response to student work and practical advice on markets, publishing procedures, etc. The course employs a workshop format and encourages serious reading and discussion of poetry. *Photocopying Fee.*

**WRTG 217** Staff
**Scriptwriting** 3 credits
Introduction to the film and television format for dramatic productions of varying lengths. Documentaries are also studied. Students not only master technique but also explore development of plot and character. Four major assignments and several short projects are required. This course may be counted toward the Theatre Track, major or minor. *Photocopying Fee.*

**WRTG 310** Dr. Rakauskas
**Written Communication; Strategies for Teaching Writing** 3 credits
(Formerly ENGL 310) This course for English/Education majors emphasizes strategies for taking students into, through, and beyond the writing process. Students have many opportunities to plan and to design writing assignments, to conduct writing sessions, and to evaluate written composition. *Photocopying Fee.*

**WRTG 313** Prof. Schaffer
**Fiction Writing II** 3 credits
(Prerequisite: WRTG 213) Advanced workshop augments intensive student writing assignments with theory of fiction composition and diverse examples. *Photocopying Fee.*

**WRTG 314** Staff
**Nonfiction Writing II** 3 credits
(Prerequisite: WRTG 214) Advanced workshop augments intensive student writing assignments with discussion and analysis of creative nonfiction by various hands. *Photocopying Fee.*

**WRTG 315** Dr. Robbins
**Play Writing II** 3 credits
(Prerequisite: WRTG 215) An advanced workshop in play writing which will include intensive reading and writing, this course will build on skills acquired in Play Writing I, and encourage students to explore theatrical styles beyond realism. This course may be counted toward the Theatre Track, major, or minor. *Photocopying Fee.*

**WRTG 316** Prof. Hill
**Poetry Writing II** 3 credits
(Prerequisite: WRTG 216) Advanced workshop on practice and theory of writing poetry. The course encourages extensive reading and intensive writing. *Photocopying Fee.*

**WRTG 382-383, 482-483** Staff
**Guided Independent Study** Variable credit
A tutorial program open to junior and senior students who have completed appropriate lower-division coursework. Context determined by genre and mentor.

**WRTG 480** Staff
**Internship** Variable credit
English majors and/or Writing minors can receive internship credits for a variety of on-the-job work experience. Approval must be obtained beforehand from the supervising faculty member, chairperson, and dean.

# ENVIRONMENTAL SCIENCE

*DR. MICHAEL C. CANN (Chemistry Department),*
*DR. MICHAEL D. CAREY (Biology Department), Program Co-Directors*

The Environmental Science major is an interdisciplinary program of the Biology and Chemistry Departments at the University of Scranton. The Environmental Science major has the following objectives: 1. To prepare students for entry-level positions (in the public or private sector) in the broad field of environmental analysis, compliance, and technology, 2. To prepare students for advanced study in environmental science, 3. To provide a sufficiently comprehensive science and liberal arts background to allow students to pursue advanced training or work in other fields that deal with environmental issues, e.g., environmental law, environmental health, and environmental regulation in business and industry.

The Environmental Science program provides a rigorous and comprehensive grounding in the biological, chemical, and physical aspects of the natural environment, and in the analytical and instrumental techniques used to investigate environmental problems. As upperclassmen, students may choose to focus more closely on either the chemical or biological aspects of environmental science, and must complete either an undergraduate research project or an internship in environmental science. The program also is designed to expose students to the social, political, regulatory, economic, and ethical concerns that are commensurate with defining and addressing environmental issues in today's world.

The Environmental Science curriculum appears below:

I. Required courses in the major and cognate include courses in Biology, Chemistry, Environmental Science, Natural Science, Mathematics, and Physics. Specific courses and the recommended sequence in which they should be taken are indicated on p. 144.

II. Electives in the major: the student must complete four courses from among the following; at *least* one course must be chosen from each group:

| | | | |
|---|---|---|---|
| Group A: | | | |
| CHEM | 342 | Environmental Toxicology | 3 credits |
| CHEM | 344 | Environmental Geochemistry | 3 credits |
| CHEM | 350 | General Biochemistry I | 3 credits |
| CHEM | 352 | Chemical Toxicology | 3 credits |
| Group B: | | | |
| BIOL | 195 | Tropical Biology | 3 credits |
| BIOL | 250 | Microbiology | 5 credits |
| BIOL | 272 | Invertebrate Biology | 5 credits |
| BIOL | 273 | Marine Ecology | 3 credits |
| BIOL | 349 | Plant Physiology | 5 credits |
| BIOL | 370 | Animal Behavior | 4½ credits |
| BIOL | 375 | Evolution | 3 credits |
| BIOL | 471 | Applied Ecology | 3 credits |
| BIOL | 472 | Systems Ecology | 3 credits |
| BIOL | 473 | Estuarine Ecology | 5 credits |

III. General education courses: In fulfilling the GE requirements, students are *strongly* encouraged to enroll in:

| | | | |
|---|---|---|---|
| PHIL | 213 | Environmental Ethics | 3 credits |
| PS | 230 | Environmental Policy | 3 credits |
| ECO | 103 | Economics of Environmental Issues | 3 credits |

Most of the required and recommended courses in the Environmental Science major reside in other departments, and their descriptions can be found under the appropriate departmental listing. Three courses, specific to the Environmental Science program, are described in the following.

# ENVIRONMENTAL SCIENCE

| | Dept. and No. | Descriptive Title of Course | Credits FALL | SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| MAJOR (GE NSCI) | CHEM 112-113 | Gen. Analytical Chem I-II | 4½ | 4½ |
| MAJOR | BIOL 141-142 | General Biology I-II | 4½ | 4½ |
| MAJOR | NSCI 201 | Science and Human Environment | | 3 |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | 3 | |
| GE FSEM-PHED | INTD 100-PHED ELECT | Freshman Seminar-Phys. Ed. | 1 | 1 |
| | | | **16** | **16** |
| | | **SECOND YEAR** | | |
| MAJOR | CHEM 232-233 | Organic Chemistry I-II | 4½ | 4½ |
| MAJOR | BIOL 371 | Ecology | 5 | |
| MAJOR | BIOL 379 | Biostatistics | | 3 |
| COGNATE (GE QUAN) | MATH 103-114[1] | Pre-Calculus-Analysis I | 3-4 | 4 |
| GE HUMN | HUMN ELECT | Humanities Elective | | 3 |
| GE T/RS-PHIL | T/RS 121-PHIL 120 | Theology I-Intro. to Philosophy | 3 | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **16½-17½** | **18½** |
| | | **THIRD YEAR** | | |
| MAJOR | CHEM 340 | Environmental Chemistry | 3 | |
| MAJOR | CHEM 370 | Instrumental Analysis | | 5 |
| MAJOR | MAJOR ELECT | Elective | | 3-5 |
| GE S/BH | POL SCI 230 | Environmental Policy | 3 | |
| GE S/BH | ECO 103 | Economics of Envir. Issues | | 3 |
| GE T/RS-PHIL | T/RS 122-PHIL 210 | Theology II-Ethics | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | 3 | |
| GE ELECT | PHYS 120-121[2] | General Physics | 4 | 4 |
| | | | **16** | **18-20** |
| | | **FOURTH YEAR** | | |
| MAJOR | MAJOR ELECT | Elective | 3-5 | 3 |
| MAJOR | MAJOR ELECT | Elective | 3-5 | |
| MAJOR | ESCI 480 or 493 | Research or Intern. in Env. Sci. | 1½ | |
| MAJOR | ESCI 481 or 494 | Research or Intern. in Env. Sci. | | 1½ |
| MAJOR | ESCI 440-441 | Topics in Environmental Sci. | 1 | 1 |
| GE T/RS or PHIL | T/RS or PHIL | Elective | 3 | |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE S/BH | ELECT | Social-Behavioral | | 3 |
| GE ELECT | ELECT | Free Electives | | 6 |
| | | | **14½-18½** | **14½** |

**Total: 130-137 CREDITS**

[1] Students entering exempt from MATH 103 may select: Computer Science I (CMPS 134) or Analysis II (MATH 221).
[2] Or Elements of Physics I and II (PHYS 141-141)

**ESCI 440-441** Staff
**Topics in** 2 credits
**Environmental Science** (Prerequisite: senior status in ESCI major or permission of instructor) One credit/semester. Discussions of current and significant environmental science issues.

**ESCI 480-481** Dr. Cann
**Internship in** 3 credits
**Environmental Science**
(Prerequisite: senior status in ESCI major or permission of instructor) 1.5 credits/semester. Student to work with private firm, advocacy group, or governmental agency on an environmental issue or technique that involves application of scientific principles to monitor, test, or develop/implement solutions to environmental problems. Project and institutional sponsor subject to approval of the Environmental Science Committee; final project report required.

**ESCI 493-494** Dr. Carey
**Research in** 3 credits
**Environmental Science**
(Prerequisite: senior status in ESCI major or permission of instructor) 1.5 credits/semester. Individual study and research of a specific environmental problem. Mentored by a Biology or Chemistry faculty member.

# FOREIGN LANGUAGES AND LITERATURES

*DR. ROBERT A. PARSONS, Chairperson*

The program of the Foreign Language Department is designed to enable students to read, write, speak and comprehend one or more foreign languages; to think and express themselves logically, precisely and critically in one or more foreign languages; to acquire skills in literary criticism by reading representative foreign authors; to gain insight into the evolution of the culture and civilization of foreign peoples as reflected in their literature.

The Bachelor of Arts program in Classical Language gives students a solid foundation in Latin and Greek to engender an appreciation of the liberal aspects of Classical Studies. Classics majors are encouraged to take their junior year abroad at Loyola University's Rome Center of Liberal Arts with which The University of Scranton is affiliated.

Foreign Language majors and students pursuing teaching certification must complete 36 credits in one language beginning with the intermediate level if it is modern, and the elmentary level if it is classical. Modern Language majors normally take at least 12 credits in a second language, either modern or classical, as their cognate. A double major may be pursued by taking 36 credits in one language, beginning with the intermediate or elementary level, and by satisfying the major and cognate requirements of another department. The placement of students at a particular foreign-language level is the responsibility of the chairperson.

The department urges students to study abroad during their junior year. In addition, it strongly recommends that students who spend the entire junior year abroad plan their studies carefully, so that they will be able to take at least one course per semester in their major language during the senior year.

## MINORS IN LANGUAGE

**FRENCH MINOR:** To minor in French, students must take 18 credits beginning at the intermediate level or higher.

**GERMAN MINOR:** To minor in German, students must take 18 credits beginning at the intermediate level or higher.

**GREEK MINOR:** To minor in Greek, students must take 18 credits beginning at the elementary level or higher.

**ITALIAN MINOR:** To minor in Italian, students must take 18 credits beginning at the elementary level or higher.

**LATIN MINOR:** To minor in Latin, students must take 18 credits beginning at the elementary level or higher.

**PORTUGUESE MINOR:** To minor in Portuguese, students must take15 credits, consisting of PORT 110 (intensive elementary Portuguese), PORT 210 (intensive intermediate Portuguese), and two advanced Portuguese courses.

**SPANISH MINOR:** To minor in Spanish, students must take18 credits beginning at the intermediate level or higher.

Minors in JAPANESE and RUSSIAN are sometimes possible, depending upon the availability of courses in these languages. They consist of 18 credits beginning at the elementary level or higher.

Students who minor in two languages may begin at any level and must complete a total of 24 credits distributed equally between the two languages.

# FOREIGN LANGUAGE

| | Dept. And No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **SPRING** |
| MAJOR (GE HUMN) | LANG[1] 211-212 or 311-312 | Intermediate or Conversation/Composition | 3 | 3 |
| COGNATE | LANG 101-102 or 211-212 | Second Modern or Classical Language | 3 | 3 |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 3 | 3 |
| GE QUAN | MATH 106 or 107 | Quantitative Methods I or II | | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | 3 | |
| GE PHIL-T/RS | PHIL 120-T/RS 121 | Intro. to Phil.-Theology I | 3 | 3 |
| GE FSEM-PHED | INTD 100-PHED | Freshman Seminar-Physical Education | 1 | 1 |
| | | | **16** | **16** |
| | | **SECOND YEAR** | | |
| MAJOR | LANG 311-312[1] | Adv. Conversation/ Comp | 3 | 3 |
| COGNATE | LANG 211-212 or 311-312 | Second Modern or Classical Language | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE NSCI | NSCI ELECT | Natural Science Electives | 3 | 3 |
| GE PHIL-T/RS | PHIL 210 - T/RS 122 | Ethics/Theology II | 3 | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **16** | **16** |
| | | **THIRD YEAR** | | |
| MAJOR | LANG[2] | Advanced Lang. Electives | 6 | 6 |
| COGNATE | LANG/ELECT | Language Elective/Elective | 3 | 6 |
| GE PHIL or T/RS | PHIL or T/RS | Elective | 3 | |
| GE S/BH | S/BH ELECT | Social/Behav. Sci. Electives | 3 | 3 |
| GE ELECT | ELECT | Electives | 3 | 3 |
| | | | **18** | **18** |
| | | **FOURTH YEAR** | | |
| MAJOR | LANG | Advanced Lang. Electives | 6 | 6 |
| COGNATE | COGNATE ELECT | Cognate Electives | 3 | 3 |
| GE ELECT | ELECT | Electives | 6 | 6 |
| | | | **15** | **15** |
| | | | | **Total: 130 CREDITS** |

[1] Students who begin language at the Advanced (311) level will take 6 fewer credits in the major and 6 more credits in the COGNATE or FREE ELECTIVE area in either the junior or senior year. In their second year, they will choose advanced language electives.

[2] Spanish majors will take SPAN 320, SPAN 321, and 3 of the following 4 courses: SPAN 313, SPAN 314, SPAN 330, and SPAN 331.

# INTERNATIONAL LANGUAGE-BUSINESS

The major in International Language-Business is a professionally oriented program. Its purpose is to make language study a more career-structured discipline by providing students with the opportunity to acquire a liberal education while, at the same time, taking courses specifically relevant to a business enterprise.

In order to bridge the communication gap between multinational businesses and the lack of functional language skills often exhibited by the personnel representing them, specialized language courses focusing on the business terminology and cultural setting of the countries in question complement the regular language and business courses in this major.

The department urges students to study abroad during their junior year. In addition, it strongly recommends that students who spend the entire junior year abroad plan their studies carefully, so that they will be able to take at least one course per semester in their major language during the senior year. Students who pursue a business internship will earn credits in addition to the 130 credits stipulated for the program, unless there is room in the free area.

| | Dept. And No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **SPRING** |
| MAJOR (GE HUMN) | LANG[1] 211-212 or 311-312 | Inter. or Conversation/Composition | 3 | 3 |
| COGNATE | LANG 101-102 or 211-212 | Second Language | 3 | 3 |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Composition-Public Speaking | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | 3 | |
| GE QUAN ELECT | MATH 106 or 107 | Quantitative Methods I or II | | 3 |
| GE PHIL - T/RS | PHIL 120 - T/RS 121 | Intro. to Philosophy-Theology I | 3 | 3 |
| GE FSEM-PHED | INTD 100-PHED | Freshman Seminar-Physical Education | 1 | 1 |
| | | | **16** | **16** |
| | | **SECOND YEAR** | | |
| MAJOR | LANG 311-312[1] | Conversation/ Composition | 3 | 3 |
| MAJOR | ACC 253 | Financial Accounting | 3 | |
| COGNATE | LANG 211-212 or 311-312 | Second Modern or Classical Lang. | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | | 3 |
| GE S/BH | S/BH ELECT | ECO 153-154 | 3 | 3 |
| GE PHIL-T/RS | PHIL 210-T/RS 122 | Ethics-Theology II | 3 | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **16** | **16** |
| | | **THIRD YEAR** | | |
| MAJOR | LANG 321-322[2] | Advanced Stylistics | 3 | 3 |
| MAJOR | LANG | Advanced Language Electives | 3 | 3 |
| MAJOR | MGT 351 | Principles of Management I | | 3 |
| MAJOR | ECO/IB 351 | Environment of Internt'l Bus. | | 3 |
| MAJOR | FIN 351 | Intro. to Finance | 3 | |
| GE ELECT | ELECT[3] | Elective | 3 | 3 |
| GE NSCI | NSCI ELECT | Natural Science Electives | 3 | 3 |
| GE T/RS - PHIL | T/RS-PHIL | Elective | 3 | |
| | | | **18** | **18** |
| | | **FOURTH YEAR** | | |
| MAJOR | LANG 319 | Business Language | | 3 |
| MAJOR | LANG | Advanced Language Electives | 6 | 3 |
| MAJOR | MKT 351 | Intro. to Marketing | 3 | |
| MAJOR | INT ELECT | One of MGT 475, MKT 475 ECO 375, FIN 475, IB 476, IB 477 | 3 | |
| GE HUMN | HUMN ELECT | Humanities elective | | 3 |
| GE ELECT | ELECT[3] | Electives | 3 | 6 |
| | | | **15** | **15** |

**Total: 130 CREDITS**

[1] Students who begin their major language level at the 311 level take 6 fewer credits in the major and 6 more credits in the cognate or free area. In their second year, they will choose advanced language electives.

[2] Students whose first language is Spanish will take SPAN 320, SPAN 321, and 3 of the following 4 courses: SPAN 313, SPAN 314, SPAN 330 and SPAN 331 in their advanced language electives area.

[3] PS 212, PS 240 and ACC 254 are recommended GE electives.

***PLEASE NOTE: Foreign Languages and Literature courses with a title prefixed by an asterisk meet three hours per week in class and one hour per week independent language lab practice.**

# FRENCH

**FREN 101-102** Staff
***(C)Elementary French** 6 credits
Designed to impart a good basic foundation in comprehending, speaking, reading, and writing the French language. Designed primarily for students with little or no background in the French language.

**FREN 203** Staff
**French Cultural Heritage** 3 credits
This course aims to develop understanding of the culture, literature and civilization of France. Representative readings from different periods. Lectures, discussions and readings in English.

**FREN 211-212** Staff
***(C,D)Intermediate French** 6 credits
(Prerequisites: FREN 101-102, or equivalent, as determined by placement exam) Designed to give greater scope and depth to the student's knowledge of the grammar and style of the French language. Taught in French.

**FREN 239** Dr. Hanks
**(C,D)French ChristianThinkers** 3 credits
(Prerequisite: An Introduction to Literature course in the English or Foreign Language department) Readings and analysis of writings by French Christians from the Middle Ages through the twentieth century. Taught in English, but credit in French available for students able to read and write in French, who meet one additional class period per week with instructor.

**FREN 311** Staff
**(C,D)French Conversation** 3 credits
(Prerequisites: FREN 211-212, or equivalent, as determined by placement exam) Intensive French conversation, emphasizing cross-cultural comparisons and development of self-expression in French. Taught in French.

**FREN 312** Staff
**(C,W)French Composition** 3 credits
(Prerequisites: FREN 211-212, or equivalent, as determined by placement exam) An intensive course in writing in French, stressing grammar, writing analysis and composition. Taught in French.

**FREN 313-314** Staff
**(C,D)Survey of French Literature** 6 credits
(Prerequisites: FREN 311-312, or equivalent) A review of French literature from the *chanson de geste* to the contemporary period.

**FREN 315-316** Staff
***Survey of French Culture and Civilization** 6 credits
(Prerequisites: FREN 311-312, or equivalent) A review of the geography, history, art and other accomplishments that comprise the heritage of the French-speaking people worldwide, from antiquity to the present.

**FREN 319** Staff
***Business French** 3 credits
(Prerequisites: FREN 311-312, or equivalent) Overview of the spoken and written language of the French business world. Formalities and conventions of letter writing, banking, import/ export, and other commercial transactions. Analysis of terminology from business-related areas such as finance, insurance and international commerce within a contemporary cultural setting.

**FREN 320** Staff
**(C)Introduction to** 3 credits
**French Literature**
(Prerequisites: FREN 311-312, or equivalent) An introduction to the principal literary genres of poetry, novel, short story, essay and drama, through analysis of representative works in the French tradition. Strongly recommended as a prerequisite for all upper-division literature courses in French.

**FREN 321-322** Staff
*** Advanced French Stylistics** 6 credits
(Prerequisites: FREN 311-312, or equivalent) Designed to strengthen the speaking and writing skills. Advanced use of grammar and syntax.

**FREN 421** Staff
**Medieval and Renaissance** 3 credits
**French Studies**
(Prerequisites: FREN 311-312, or equivalent) Selected literary works from the eleventh century to the late Renaissance.

**FREN 423** Dr. Petrovic
**Seventeenth-Century** 3 credits
**French Studies**
(Prerequisites: FREN 311-312, or equivalent) Literary, philosophical, and social expression from 1610 to 1715.

**FREN 425** Dr. Petrovic
**Eighteenth-Century** 3 credits
**French Studies**
(Prerequisites: FREN 311-312, or equivalent) The Enlightenment from 1715 to 1789.

**FREN 427** Dr. Petrovic
**Nineteenth-Century** 3 credits
**French Novel**
(Prerequisites: FREN 311-312, or equivalent) The development of prose narration as reflected in the literary movements of the age.

**FREN 429** Dr. Petrovic
**Nineteenth-Century** 3 credits
**French Poetry**
(Prerequisites: FREN 311-312, or equivalent) The development of poetic forms from the romantic to the symbolist movement inclusively.

**FREN 430** Dr. Hanks
**French Women Writers** 3 credits
(Prerequisites: FREN 311-312, or equivalent) Women's view of themselves and the world as reflected in their literary creations. Cross-listed with Women's Studies Concentration. (See Women's Studies Concentration section.)

**FREN 431** Dr. Petrovic
**Twentieth-Century** 3 credits
**French Novel**
(Prerequisites: FREN 311-312, or equivalent) The development of prose narration from the Dreyfus case to the present.

**FREN 432** Dr. Hanks
**French Short Story** 3 credits
(Prerequisites: FREN 311-312, or equivalent) Principal practitioners of the short story in French, including contemporary authors.

**FREN 433** Dr. Petrovic
**Twentieth-Century** 3 credits
**French Drama**
(Prerequisites: FREN 311-312, or equivalent) The development of dramatic forms from the *Theatre Libre* to the present.

**FREN 434** Dr. Hanks
**French Novel Into Film** 3 credits
(Prerequisites: FREN 311-312, or equivalent) Examination of the transformations effected in major French novels adapted for the screen, and exploration of alternative solutions to the problems posed.

**FREN 435** Staff
**The French Theater** 3 credits
(Prerequisites: FREN 311-312, or equivalent) An inquiry into the various forms of the French theater through a study of significant representative works from different periods.

**FREN 437** Dr. Zanzana
**Francophone** 3 credits
**African Literature**
A study of Francophone African Literature from the Maghreb to the African diaspora, with empasis on main literary currents, ideology, political climates, linguistic traditions, and literary manifestations in each country.

**FREN 482-483** Staff
**Guided** Variable credit
**Independent Study**
(Prerequisites: FREN 311-312, or equivalent) A tutorial program open to Juniors and Seniors only. Content determined by mentor.

# GERMAN

**GERM 101-102** Staff
***(C)Elementary German** 6 credits
(Prerequisite: none) A complete course in the fundamentals of the German language. Emphasis on reading of graded texts, with written, oral and aural exercises. Designed for students with little or no background in the German language.

**GERM 211-212** Staff
***(C,D)Intermediate German** 6 credits
(Prerequisites: GERM 101-102 or equivalent) Reading from modern authors of moderate difficulty. Oral and written exercise. Systematic review of German grammar.

**GERM 213-214** Dr. Kamla
***Introduction to** 6 credits
**Business German**
(Prerequisites: GERM 101-102, or equivalent) Specialized intermediate-level course for students who wish to focus their skills on the language of the business world. Oral and written exercises. Systematic review of German grammar.

**GERM 295** Reverends Pantle
**(D)German Culture** and Lally
**and Language** 3 credits
A three credit intersession course to Gemany, Austria and Switzerland. Credits can be used in Free Area and for the Cultural Diversity credit but not for German major or minor. Course offers the opportunity to compare the German and American cultures. Study of history, music, political science, language and modern day attitudes. Team-taught by University of Scranton faculty from the Departments of Foreign Languages, Political Science, History and Philosophy.

**GERM 311-312** Staff
***(C,W)Advanced German** 6 credits
**Composition and Conversation**
(Prerequisites: GERM 211-212, or equivalent) Selected texts in prose and poetry. Advanced practice in conversation and composition. Survey of German grammar.

**GERM 313-314** Dr. Kamla
**(C,D)Survey of German** 6 credits
**Literature and Culture**
(Prerequisites: GERM 311-312, or equivalent) A survey of German literature from the eleventh century to the contemporary period, with special emphasis on the main intellectual currents as well as the social and political developments.

**GERM 319** Dr. Kamla
***Business German** 3 credits
(Prerequisites: GERM 311-312, or equivalent) Overview of the spoken and written language of the German business world. Formalities and conventions of letter writing, banking, import/export, and other commercial transactions. Analysis of terminology from business-related areas such as finance, insurance and international commerce within a contemporary cultural setting.

**GERM 321-322** Staff
***(W)Advanced Stylistics** 6 credits
(Prerequisites: GERM 311-312, or equivalent) Advanced study of syntax and semantics aimed at the development of stylistic sensitivity. Interdisciplinary textual analyses (business and commercial German, communications media, the sciences and humanities) for further practice in composition and conversation.

**GERM 421** Dr. Kamla
**German Classicism and** 3 credits
**Romanticism**
(Prerequisites: GERM 311-312, or equivalent) A study of the literature of the eighteenth (Goethe, Schiller, Holderlin) and early nineteenth century (Kleist, Hoffmann, Novalis) in their Classical and Romantic contexts.

**GERM 423** Dr. Kamla
**Realism and Naturalism** 3 credits
(Prerequisites: GERM 311-312, or equivalent) A study of the works of late nineteenth-century authors, such as Storm, Fontane and Keller.

**GERM 425** Dr. Kamla
**German Literature up to 1945** 3 credits
(Prerequisites: GERM 311-312, or equivalent) An in-depth study of such authors as Brecht, Mann, Kafka and Rilke.

**GERM 427** Dr. Kamla
**Postwar German Literature** 3 credits
(Prerequisites: GERM 311-312, or equivalent) Concentration on contemporary authors such as Frisch, Durrenmatt, Grass and Boll, as well as representative authors from the former East Germany.

**GERM 482-483** Staff
**Independent Study** Variable credit
(Prerequisites: GERM 311-312, or equivalent) A tutorial program open to junior and senior students only. Content determined by mentor.

# HEBREW

**HEBR 101-102** Staff
**(C)Biblical Hebrew** 6 credits
A systematic introduction to the fundamentals of Biblical Hebrew grammar and to certain aspects of ancient Semitic language and culture.

*Note: Additional work in Italian, Japanese, Portuguese, and Russian is available by arranging independent study and/or foreign study.*

# ITALIAN

**ITAL 101-102** Staff
***(C)Elementary Italian** 6 credits
Introduction to the Italian language. Designed for beginners.

**ITAL 207** Dr. Picchietti
**(C,D,W)Italian Women's Writing in Translation** 3 credits
This course addresses a multitude of women's voices and experiences in Italy in the twentieth century, as expressed in works of prose, poetry, theater, and film. Not all the artists subscribe to a feminist ideology, but their works share an interest in issues concerning women. Students will examine the styles, themes, and historical contexts of the primary works. This course does not count toward the Italian minor or major.

**ITAL 208** Dr. Picchietti
**(D,W)Envisioning Italy From Novel to Film: The Case of Neorealism** 3 credits
This course addresses the way in which authors and film makers have envisioned Italy in the Neorealist tradition. Students will analyze neorealist novels and their cinematic adaptations to determine similarities and differences in the artists' visions and interpretations of Italian society. This course does not count toward the Italian minor or major.

**ITAL 209** Dr. Picchietti
**Italian Cinema: From Origins to Present** 3 credits
An examination of the evolution of Italian cinema from the silent era to the present. Focus on the impact of historical events on the film industry, on the changing concerns and perspectives of film makers, and on the transformations in style and content in reaction to specific moments in Italian history. Films with subtitles. Taught in English. This course does not count for any minor or major requirement in foreign language.

**ITAL 211-212** Staff
***(C,D)Intermediate Italian** 6 credits
(Prerequisites: ITAL 101-102, or equivalent) Grammatical review, written and oral composition with selected cultural readings of intermediate difficulty.

**ITAL 295** Dr. Picchietti
**Italian Culture and Society** 3 credits
An examination of Italian culture and society from the Renaissance to today. The course traces the development of Italian culture and society through primary texts, including essays, plays, short stories, films, opera and contemporary music, and sculpture and painting. The course includes travel to Italy.

**ITAL 311-312** Staff
***(C, D)Advanced Italian** 6 credits
**Composition and Conversation**
(Prerequisite: ITAL 211-212, or equivalent) An intensive course in Italian composition and conversation with emphasis on detailed study of advanced grammatical and stylistic usage of the Italian language.

**ITAL 313** Dr. Picchietti
**Survey of Italian Literature I** 3 credits
(Prerequisite: ITAL 311-312, or equivalent) This course, conducted in Italian, introduces students to nineteenth-and twentieth-century Italian literature and to significant literary movements and figures from these periods.

**ITAL 314** Dr. Pichietti
**Survey of Italian Literature II** 3 credits
(Prerequisites: ITAL 311-312, or equivalent) This course, conducted in Italian, introduces students to Italian literature from the medieval period to the eighteenth century. It focuses on significant literary movements and figures from these periods.

# JAPANESE

**JAP 101-102** Staff
***(C)Elementary Japanese** 6 credits
Development of the fundamental skills, listening, speaking, reading and writing, with emphasis on language performance. Emphasis on practical application of the basic skills for business-related activities. Relevant cultural aspects are introduced. Designed primarily for students with no background in the Japanese language.

**JAP 211-212** Staff
***Intermediate Japanese** 6 credits
(Prerequisites: JAP 101-102, or equivalent) This course continues development of the four major skills: listening, speaking, reading and writing. Upon completion of the course students will understand all the basic concepts of the structure of the language.

# PORTUGUESE

**PORT 110** Dr. Ledford-Miller
***(C)Intensive Elementary** 4.5 credits
**Portuguese**
A video-based introduction to Brazilian Portuguese, this course covers basic grammar and vocabulary needed for listening, speaking, reading, and writing Portuguese. Students will also develop some cultural understanding of Brazil, Portugal, and other Lusophone countries. Meets 4 days a week. Offered fall only, even years.

**PORT 210** Dr. Ledford-Miller
***(C,D)Intensive Intermediate** 4.5 credits
**Portuguese**
(Prerequisites: PORT 110 or equivalent) A continuation of elementary Portuguese. Students will refine through oral and written activities, literary and other readings, and video, the skills learned in PORT 110. Cultral knowledge of the Lusophone world will also be further developed. Meets 4 days a week. Offered spring only, odd years.

*The above courses meet the cognate language requirement and may serve as the basis for a 15-credit minor in Portuguese.*

# RUSSIAN

**RUSS 101-102** Staff
***(C)Elementary Russian** 6 credits
Primary emphasis on developing the skills of understanding, speaking, reading and writing Great Russian. A thorough and continual study of the Cyrillic alphabet is an integral part of the course's content.

**RUSS 211-212** Staff
***Intermediate Russian** 6 credits
(Prerequisites: RUSS 101-102 or equivalent) This course continues development of the four major skills: listening, speaking, reading, and writing. It builds on the grammatical concepts learned in RUSS 101 and 102 and provides a solid foundation for the student interested in visiting Russia and/or in reading the Russian Classics, contemporary literature, and newspapers.

## SPANISH

**SPAN 101-102** Staff
***(C)Elementary Spanish** 6 credits
Fundamentals of grammar, pronunciation, conversation; suitable readings and written exercises. Designed primarily for students with little or no background in the Spanish language.

**SPAN 203** Dr. Ledford-Miller
**(C, D)Topics in Latin** 3 credits
**American Cultural Heritage**
This course aims to develop understanding of the culture, literature and civilization of Latin America (i.e., Brazil and Spanish America). The topic and the region of Latin America studied may change, and thus this course may be repeated for credit when appropriate. Lectures, discussions and readings in English.

**SPAN 211-212** Staff
***(C, D)Intermediate Spanish** 6 credits
(Prerequisites: SPAN 101-102, or equivalent, as determined by placement exam) Grammatical review, written and oral composition with selected cultural readings of intermediate difficulty.

**SPAN/PS 295** Drs. Parsons and Kocis
**(C,D,S)Contemporary** 6 credits
**Mexican Culture and Language**
(Prerequisite: Span 211 or higher) A six-credit intersession travel course to Guadalajara, Mexico, for three credits in Humanities (foreign-language area, intermediate and/or advanced level), three credits in the social sciences (political-science area), as well as cultural-diversity credit. The course is team-taught by University of Scranton faculty from the departments of Foreign Languages and Political Science with assistance from Mexican faculty at UNIVA.

**SPAN 296** Dr. Ledford-Miller
**(C, D)Topics in the Culture,** 3 credits
**Civilization, and**
**Literature of Latin America**
This travel course aims to develop understanding of the culture, literature and civilization of Latin America (i.e., Brazil and Spanish America). The topic and the region of Latin America studied may change; thus, this course may be repeated for credit when appropriate. Lecture, discussions and readings in English. Students desiring credit in Spanish must do all readings and writing in Spanish as well as meet independently with the professor for discussion in Spanish.

**SPAN 310** Staff
***Medical Spanish** 3 credits
(Prerequisites: SPAN 211-212, or equivalent) Designed for the student who plans to work in any area of health care, this course focuses on the needs and problems of Spanish-speaking patients. Students learn specialized vocabulary and improved communicative ability through conversation and composition and develop an increased awareness of health issues often of particular concern to Hispanics.

**SPAN 311** Staff
**(C, D)Spanish Conversation** 3 credits
(Prerequisites: SPAN 211-212, or equivalent, as determined by placement exam) Reading-based conversation stressing development of self-expression in Spanish. Practice in oral composition.

**SPAN 312** Staff
**(C,W)Spanish Composition** 3 credits
(Prerequisite: SPAN 212 or equivalent) Intensive writing practice stressing grammar, writing analysis, and composition.

**SPAN 313** Staff
***Spanish Culture and Civilization** 3 credits
(Prerequisites: SPAN 311-312, or equivalent) An overview of the diverse historical, political, religious and artistic factors that have determined the cultural make-up of the peoples of the Iberian peninsula.

**SPAN 314** Staff
***(D, W)Topics in Latin-American Culture and Civilization** 3 credits
(Prerequisites: SPAN 311-312, or equivalent) The course examines the diverse cultural, historical, linguistic, religious, and political features of Latin America. Content will vary according to the cultural/geographic region examined, and the course, therefore, may be repeated for credit.

**SPAN 319** Dr. Parsons
***Business Spanish** 3 credits
(Prerequisites: SPAN 311-312, or equivalent) Overview of the spoken and written language of the Spanish business world. Formalities and conventions of letter writing, banking, import/export, and other commercial transactions. Analysis of terminology from business-related areas such as finance, insurance and international commerce within a contemporary cultural setting.

**SPAN 320** Staff
**(C)Introduction to Literature** 3 credits
(Prerequisites: SPAN 311-312, or equivalent) An introduction to the principal genres of literature (poetry, short story, essay, drama and novel) through analysis of representative works in the Hispanic tradition. Required prerequisite for all upper-division literature courses.

**SPAN 321** Staff
***Advanced Stylistics** 3 credits
(Prerequisites: SPAN 311-312, or equivalent) Designed to achieve more sophisticated use of Spanish, both orally and in writing. Includes intensive examination of compositions and translation exercises, as well as discussion of areas of particular difficulty for the non-native speaker (e.g., false cognates and unfamiliar structures).

**SPAN 323** Staff
***Contemporary Issues** 3 credits
(Prerequisite: SPAN 311-312 or equivalent) A conversation-intensive course. Discussion and reports based on readings in a broad range of current periodicals and focusing on issues of relevance to the Hispanic world and to the particular career or interest areas of students.

**SPAN 330** Staff
**(C)History of Spanish Literature** 3 credits
(Prerequisite: SPAN 320) Study of Spanish literature from *Cantar de Mio Cid* to twentieth century, with emphasis on main literary currents in each century.

**SPAN 331** Staff
**(C,D)Survey of Spanish-American Literature** 3 credits
(Prerequisite: SPAN 320) A survey of Spanish-American literature from the sixteenth century to the present, with representative readings from each of the principal cultural areas.

**SPAN 421** Dr. Parsons
**Twentieth-Century Spanish Drama** 3 credits
(Prerequisite: SPAN 320) Peninsular drama of the twentieth century including dramatic forms after Buero Vallejo and new directions of Spanish theatre in post-Franco era.

**SPAN 422** Dr. Parsons
**Spanish-American Drama** 3 credits
(Prerequisite: SPAN 320) Spanish-American drama from the late nineteenth century to the present, with emphasis on contemporary trends.

**SPAN 430** Staff
**Hispanic Women Writers** 3 credits
(Prerequisite: SPAN 320) This course examines writing by Hispanic women, including prose, poetry, drama and essays, and investigates the social, political, aesthetic, and feminist contexts of their writing. Cross-listed with Women's Studies Concentration. (See Women's Studies Concentration section.)

**SPAN 431** Staff
**Spanish-American Short Story** 3 credits
(Prerequisite: SPAN 320) The development of the short story as a literary genre in Spanish America from the beginning of the 19th century to the present.

**SPAN 433** Staff
**Hispanic Lyric Poetry** 3 credits
(Prerequisite: SPAN 320) The development of lyric poetry in the Spanish-speaking world. Examples of early poetry in Spain and Spanish America are studied to establish an awareness of the Hispanic lyric tradition, but the main focus of the course is on twentieth century Spanish America and such figures as Gabriela Mistral, Pablo Neruda, and Cesar Vallejo.

**SPAN 482-483** Staff
**Guided Independent Study** Variable credit
(Prerequisites: SPAN 311-312, or equivalent) A tutorial program open to junior and senior students only. Content determined by mentor.

**SPAN 484** Staff
**Topics in Spanish Prose** 3 credits
(Prerequisites: SPAN 320) Prose fiction of Spain and/or Spanish America. Topics may focus on an author, a period, a movement, a country or region, or a theme. Content may vary and the course may, therefore, be repeated for credit with consent of Department Chair.

## CLASSICAL LANGUAGES

# GREEK

**GRK 111-112** Staff
**(C)Elementary Greek** 6 credits
An intensive course in the fundamentals of Classical Greek grammar.

**GRK 113-114** Staff
**New Testament Greek** 6 credits
A systematic introduction to the fundamentals of the grammar of Koine Greek as it is found in the New Testament.

**GRK 205** Dr. Petrovic
**(D)Legacy of Greece and Rome** 3 credits
Survey of the artistic and cultural treasures of classical Greece and Rome with a focus on their enduring legacy in our own civilization.

**GRK 207** Dr. Wilson
**Roots of Greek in English** 3 credits
The relationship of both Greek and English to the other languages of the Indo-European family; the Greek elements that have come into English are presented: bases, prefixes, numerals, hybrids, etc. A study of the 20-25% English words which come from Greek, particularly in scientific fields.

**GRK 211-212** Staff
**Intermediate Greek** 6 credits
(Prerequisites: GRK 111-112 or equivalent) Review of fundamentals. Readings from Zenophon, Euripides, and the New Testament.

**GRK 213** Dr. Wilson
**(C,D,W)Classical Greek Literature and Mythology** 3 credits

This course examines the role that mythology played in Greek literature, and examines the changing attitudes of the Greeks towards the Olympian gods from Homer to the fourth century B.C. All readings and lectures in English.

**GRK 220** Dr. Wilson
**Ancient Civilization: Greece** 3 credits

The political, constitutional, and cultural history of Greece from the earliest times to the death of Alexander the Great. All readings and lectures in English.

**GRK 295** Dr. Petrovic
**(D)Classic and Contemporary Greek Culture** 3 credits

This travel course (9 days during the Spring/Easter Break) is a study of the historic cultural treasures of classical Greece and a visual and empirical examination of its remains in present Greece with a special focus on the enduring Greek legacy in our own Western civilization. The students will be acquainted, as well, with contemporary Greece, its people, its economy, its social dynamics, and its role in today's Europe. When we are in Greece, we will visit Athens, the Acropolis, the National Archeological Museum, Corinth, Mycenae, Epidarus, Olympia, Delphi, three Greek islands, and many other contemporary Greek cultural landmarks. Lecture, discussion, reading, and examinations in English. In addition to travel, students will attend twenty regularly scheduled classes before and after the trip during the spring semester. (No prerequisite)

**GRK 311-312** Staff
**Readings in Greek Literature** 3-6 credits

(Prerequisites: GRK 211-212 or equivalent) Selections from Greek writers to suit the students' special interests.

**GRK 482-483** Staff
**Guided Independent Study** Variable credit

(Prerequisites: GRK 211-212 or equivalent) A tutorial program open to junior and senior students only. Content determined by mentor.

# LATIN

**LAT 111-112** Staff
**(C)Elementary Latin** 6 credits

An intensive course in the fundamentals of Latin. Reading and composition.

**LAT 205** Staff
**History of Latin Literature** 3 credits

A survey of Roman and post-Roman Latin literature. The course is taught in English. No Latin prerequisite.

**LAT 207** Dr. Wilson
**Roots of Latin in English** 3 credits

The relationship of both Latin and English to the other languages of the Indo-European family; the Latin elements that have come into English are presented: bases, prefixes, numerals, hybrids, etc. Approximately 60-65% of English words come from Latin.

**LAT 211-212** Staff
**(C)Intermediate Latin** 6 credits

(Prerequisites: LAT 111-112 or equivalent) Review of fundamentals. Reading of selections from Caesar, Cicero and Virgil.

**LAT 213** Dr. Wilson
**(C, D, W)Classical Roman Literature and Mythology** 3 credits

The course examines the role that mythology played in Roman literature, and examines the changing attitudes of the Romans toward the divinities, manifested in literature from Plautus to Apuleius. All readings and lectures in English.

**LAT 220** Staff
**Ancient Civilization: Rome** 3 credits

The political, constitutional, and cultural history of Rome from the earliest times to the end of the Western empire. All readings and lectures in English.

**LAT 311-312** Dr. Wilson
**Readings in Latin Literature** 3-6 credits
(Prerequisites: LAT 211-212 or equivalent) Selections from Latin writers to suit the students' special interests. Topics will vary from year to year; the course may, therefore, be repeated for credit.

**LAT 482-483** Staff
**Guided** Variable credit
**Independent Study**
(Prerequisites: LAT 211-212) A tutorial program open to junior and senior students only. Content determined by mentor.

## LITERATURE

**LIT 105** Staff
**(C,D)Introduction to** 3 credits
**World Literature in Translation**
This course introduces students to significant works in English translation of world literature, while introducing the genres of narrative (fiction and non-fiction), poetry, and drama, and the critical terminology needed to discuss them. Taught in English. Readings may vary.

**LIT 205** Staff
**(C, D, W)Modern** 3 credits
**Latin-American Literature**
**in Translation**
A survey in English of twentieth-century Latin American writers, including Gabriel Garcia Marquez (Colombia), Jorge Luis Borges (Argentina), Rigoberta Menchu (Guatemala), Carlos Fuentes (Mexico), Joaquim Maria Machado de Assis (Brazil) and Isabel Allende (Chile). Introduction to major literary movements, such as the "Boom" and "magical realism," which have influenced writers in the U.S., Europe and elsewhere.

**LIT 206** Dr. Ledford-Miller
**Travelers and Their Travels** 3 credits
An examination of the history and literature of travel as expressed in a variety of both fictional and non-fictional accounts.

**LIT 207** Dr. Ledford-Miller
**(C, D, W)Literature of** 3 credits
**American Minorities**
Examination of racial and ethnic groups from the settlement of America until present day. Examination of the historical context and current situation of Native Americans, African-Americans, Hispanic Americans, Asian Americans, Women-as-minority, and other marginalized groups. Readings from literature and other disciplines. Cross-listed with Women's Studies Concentration.

**LIT 208** Dr. Petrovic
**(C,D)French Masterpieces** 3 credits
**in English Translation**
The study of selected major works from the leading French writers of the nineteenth and twentieth century who have made an important contribution to the development of Western civilization. Such authors as Stendhal, Flaubert, Gide, Proust, Camus and Malraux will be discussed.

**LIT 209** Dr. Petrovic
**(C,D)Masterworks of Russian** 3 credits
**and Slavic Literature**
A survey of major literary achievements of Slavic peoples. Dostoyevsky, Tolstoy, Cosic, Sienkiewicz and Solzhenitsyn will be read. No knowledge of Slavic languages is required. All readings and lectures are in English.

**LIT 384** Dr. Ledford-Miller
**(C,D)Special Topics in** 3 credits
**American Minority Literature**
This course examines a particular minority group in American society through texts written by and about that group. Representative groups include, for example, Native Americans, African Americans, Asian Americans, Hispanic Americans, and Women. This course may be repeated for credit when content varies.

# HISTORY

*DR. MICHAEL DeMICHELE, Chairperson*

The department aims: 1. To train the student in solid historical methodology; 2. To present history as the study of interdependent human activities and concrete events which have social significance; 3. To engender an intelligent and critically sympathetic understanding of various civilizations and cultures.

Outstanding students are eligible for consideration in the Combined Baccalaureate/Master's Degree program (please refer to the section on The Graduate School and to the Graduate School Catalog for specifics of the program). Through careful utilization of intersession and summer sessions, it is possible to complete both the B.A. and M.A. degrees within a four-year period. Contact the chair or the graduate-program director of the department for additional information.

See the Pre-Law section in the catalog for details of the department's success in this area.

**MINOR.** A minor in History (18 credits) should include HIST 110-111 or HIST 120-121 or HIST 125-126 plus any four additional history courses.

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| MAJOR | HIST 110-111 | United States History | 3 | 3 |
| MAJOR | HIST 120-121 | Europe: 1500 to Present | 3 | 3 |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | 3 | |
| GE QUAN | QUAN ELECT | Quantitative Reasoning | | 3 |
| GE T/RS- PHIL | T/RS 121-PHIL 120 | Theology I-Introduction to Philosophy | 3 | 3 |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **16** | **16** |
| | | **SECOND YEAR** | | |
| MAJOR | HIST 140 [2] | Research Methods | 3 | |
| MAJOR | HIST ELECT | Electives | 3 | 6 |
| COGNATE | COGNATE ELECT [1] | Electives | 3 | 3 |
| GE S/BH | S/BH ELECT | Social/Behavioral Elective | 3 | 3 |
| GE T/RS- PHIL | T/RS 122-PHIL 210 | Theology II-Ethics | 3 | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **16** | **16** |
| | | **THIRD YEAR** | | |
| MAJOR | HIST ELECT | Electives | 6 | 3 |
| COGNATE | COGNATE ELECT [1] | Electives | 3 | 3 |
| GE NSCI | NSCI ELECT | Natural-Science Electives | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE ELECT | ELECT | Free Electives | 3 | 3 |
| GE PHIL-T/RS | PHIL or T/RS | Elective | | 3 |
| | | | **18** | **18** |
| | | **FOURTH YEAR** | | |
| MAJOR | HIST 490 or 491 [3] | Seminar-Elective | 3 | 3 |
| COGNATE | COGNATE ELECT [1] | Electives | 6 | 6 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE ELECT | ELECT | Free Electives | 3 | 3 |
| | | | **15** | **15** |
| | | | | **Total: 130 CREDITS** |

[1] Students may use cognate electives to develop a second major.

[2] Department requires HIST 140, The Craft of the Historian, for history majors; students admitted to 4-year BA/MA program are recommended to take HIST 500, Research Methods. No student should take both Research Methods courses.

[3] Senior History majors are required to take HIST 490 or HIST 491.

# INTERNATIONAL STUDIES

A major in International Studies seeks to provide the student with a full recognition and understanding of the multitudinous forces which shape the contemporary world – nationalism, wars, political and economic ideologies, cultural differentials, and modern technology. Such a broad knowledge and understanding of world affairs can be utilized in careers in teaching, international business, the legal profession, journalism, the Foreign Service of the United States and other government agencies.

**MINOR.** A minor in International Studies (18 credits) should include HIST 110 and 111 or PS 130 and 131 plus four additional courses from the following: PS 212, PS 213, PS 215, PS 217, PS 218, PS 221, PS 222, PS 295, PS 318, PS 319, PS 328, PS 330, PS 332, PS 338; HIST 125, HIST 126, HIST 211, HIST 214, HIST 215, HIST 219, HIST 220, HIST 226, HIST 295, HIST 335, HIST 338, and HIST 339.

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **SPRING** |
| MAJOR | HIST 110-111 | United States History | 3 | 3 |
| COGNATE | PS 130-131 | American National Government | 3 | 3 |
| COGNATE | LANG 101-102 or 211-212 | Elementary or Intermediate | 3 | 3 |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | 3 | |
| GE QUAN | QUAN ELECT | Quantitative-Reasoning Elective | | 3 |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **16** | **16** |
| | | **SECOND YEAR** | | |
| MAJOR | HIST 120-121 | Europe: 1500 to Present | 3 | 3 |
| MAJOR | PS 212-ELECT | Internat'l Rel.-Elective | 3 | 3 |
| MAJOR | GEO 134 | World Regional Geography | | 3 |
| COGNATE | LANG | Intermediate or Advanced | 3 | 3 |
| GE T/RS-PHIL | T/RS 121-PHIL 120 | Theology I-Intro. to Philosophy | 3 | 3 |
| GE ELECT | ELECT | Elective | 3 | |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **16** | **16** |
| | | **THIRD YEAR** | | |
| MAJOR | HIST or POL SCI[1] | Electives | 3 | 3 |
| GE S/BH | ECO 153-154 | Prin. of Micro-Macro Econ. | 3 | 3 |
| GE NSCI | NSCI ELECT | Electives | 3 | 3 |
| GE HUMN | HUMN ELECT | Electives | 3 | 3 |
| GE ELECT | ELECT | Electives | 3 | 3 |
| GE T/RS-PHIL | T/RS 122-PHIL 210 | Theology II-Ethics | 3 | 3 |
| | | | **18** | **18** |
| | | **FOURTH YEAR** | | |
| MAJOR | I.S. 390 ELECT | Seminar-Elective | 3 | 3 |
| MAJOR | HIST or PS[1] | Electives | 3 | 3 |
| COGNATE | ELECT | Electives | 3 | 3 |
| GE HUMN | HUMN ELECT | Electives | 3 | 3 |
| GE ELECT | ELECT | Elective | | 3 |
| GE PHIL or T/RS | PHIL or T/RS | Elective | 3 | |
| | | | **15** | **15** |
| | | | **Total: 130 CREDITS** | |

[1]Major electives to be selected from PS 213, PS 215, PS 217, PS 218, PS 221, PS 222, PS 295, PS 318, PS 319, PS 328, PS 330, PS 332, PS 338; HIST 125, HIST 126, HIST 211, HIST 214, HIST 215, HIST 219, HIST 220, HIST 226, HIST 295, HIST 335, HIST 338, and HIST 339; HIST 140, Research Methods, recommended.

**HIST 110-111** Staff
**(C)History of the United States** 6 credits
The United States from the time of its European beginnings to the present with special emphasis on the history of Pennsylvania; colonial origins to Reconstruction; Gilded Age to the modern era.

**HIST 120-121** Staff
**(C)Europe, 1500 to the Present** 6 credits
European history with concentration upon the political aspects of European development. The rise of national monarchies; political, social, economic and intellectual developments; industrialism, the new nationalism and liberalism.

**HIST 125-126** Staff
**Latin America History** 6 credits
Pre-Colombian America; the Spanish and Portuguese Colonial area, developments to the early nineteenth century. The Latin American Republics, Castroism, The Alliance for Progress, with special stress on inter-American problems.

**HIST 140** Staff
**(W)The Craft of the Historian** 3 credits
Introduction to the craft of the historian including the techniques of historical study, research and writing as well as historiography. Students will be given various exercises dealing with both primary and secondary sources to enable them to think historically through writing exercises based on historical questions.

**HIST 210** Dr. Homer
**History as Biography** 3 credits
An exploration of the nature of biography and its relationship to the study of the past. Biographies of several major figures from the modern era will be read and studied to exemplify different biographical techniques and their utility as means of historical inquiry.

**HIST 211** Dr. Domenico
**The Third World: Empire to Independence** 3 credits
(Formerly H/PS 238) A study of the developing nations with the developed nations in the contemporary world.

**HIST 212** Dr. DeMichele
**(D)Rebels, Rogues, and Reformers** 3 credits
A sociological cross-cultural, and psychohistorical approach to those folk heroes, political "expropriators" and bandits whose spectacular exploits have been romanticized and preserved through the centuries. Figures such as Robin Hood, Cartouche, Pancho Villa, Jesse James, Che Guevara and others will be considered.

**HIST 213** Dr. DeMichele
**Great Discoveries** 3 credits
Historical analysis and assessment of the great scientific discoveries and technological developments of mankind from the Age of the Renaissance to the space age.

**HIST 214** Dr. DeMichele
**(C,D)History of Contemporary World Politics** 3 credits
(Formerly H/PS 214) Deals directly with the history of the political, economic, and social issues that are current in international affairs including the future possibilities of world order and the crises of foreign-policy-making.

**HIST 215** Staff
**Modern Economic History** 3 credits
A comparative approach to the historical economic development of Europe and America from early modern to modern times including a study of economic principles, theories, and issues.

**HIST 216** Dr. Kennedy
**(C, D)Race in American History** 3 credits
The course studies the role of race in American history from the colonial era to the present, focusing on the experience of African-Americans with consideration given to other racial and ethnic groups. Topics include: slavery; "Jim Crow" laws; the Ku Klux Klan; black migration of the twentieth century; African-American community life; and the civil rights struggle.

**HIST 217** Dr. Hueston
**(C)History of American Catholicism** 3 credits
A survey of the significant events, trends, and individuals reflecting the Catholic experience in America from the earliest colonial settlements to the post-Vatican era.

**HIST 218** Dr. Homer
**The War at War, 1939-45** 3 credits
Examination of the tactics, strategy, and global significance of World War II. The logistics and scope of the conflict. Importance of propaganda, patriotism and the people. Film-seminar approach. Film fee.

**HIST 219** Dr. DeMichele
**(C, D)Modern World History** 3 credits
A study of change and development in the world during the twentieth century. Emphasis on cultural, economic, and political differences between Western and non-Western states.

**HIST 220** Dr. Homer
**War and Modern Society** 3 credits
(Formerly H/PS 215) Role of military force in international relations; historical background focusing on wars, American and European, of nineteenth and twentieth century; theories of function of war; arms control and deterrence of war.

**HIST 221** Dr. Conover
**(C, D)The American West** 3 credits
A study of acquisition, settlement, and development of the Trans-Mississippi West, including the mining, cattleman's and farmer's frontiers; Indian removal, and Manifest Destiny in Texas and Oregon.

**HIST 222** Dr. Champagne
**History of American Presidential Elections** 3 credits
A study of the candidates, issues and campaigns in American Presidential elections from Washington to Kennedy. The course will also examine the evolution of the electoral process and the relationship between political parties.

**HIST 223** Staff
**Introduction to Irish History** 3 credits
An introduction to Irish History which surveys the principal political, social, economic and intellectual changes in Irish life since the time of the pre-Celtic peoples. Topics will include: Celtic civilization; the coming of Christianity; the Norman invasion; the English connection; Irish nationalism; and the "troubles" in Northern Ireland.

**HIST 224** Dr. DeMichele
**(C,D)Ethnic & Racial Minorities in Northeastern Pennsylvania** 3 credits
(Formerly H/PS 224) Film-seminar approach to the study of various ethnic groupings in Northeastern Pennsylvania. Seeks to achieve better understanding of the immigrant's problems and accomplishments through use of documentary and feature films.

**HIST 225** Staff
**Imperial Russia** 3 credits
From the crystallization of political forms in the ninth century through the Kievan State, Mongolian Invasion, rise of Muscovy to the Eurasian Empire from the seventeenth to the end of the nineteenth century.

**HIST 226** Staff
**Russian Revolution and Aftermath** 3 credits
A study of the development of radical thought in nineteenth and twentieth century Russia. Analysis of various factors and forces at work in revolutionary Russia. Lenin, War, Communism, NEP, Stalin.

**HIST 227** Dr. Shaffern
**The Civilization of Islam** 3 credits
An introduction to the history of Islamic civilization from the career of the Prophet Muhammed (C.62AD) to the eve of European colonization and imperialism.

**HIST 228-229** Dr. Shaffern
**Ancient History** 6 credits
A survey of ancient civilizations of the Near East and Mediterranean worlds. The culture, society and science of Mesopotamia and Persia; Egypt – the Gift of the Nile; the ancient Israelites; heroic, archaic, classical and Hellenistic Greece; republican and imperial Rome; the origins of Christianity.

**HIST 230-231** Dr. Shaffern
**Medieval History** 6 credits
The civilization of medieval Christendom from the fall of the Roman Empire to the beginning of the fourteenth century; its religious, social, economic, cultural and political aspects; the relationship between church and society, belief and life style, ideal and reality; the interaction between Western Christendom, Byzantium and Islam.

**HIST 232** Dr. DeMichele
**England, 1485 to 1714** 3 credits
The end of the Wars of the Roses; Tudor Absolutism, Henry VIII and Reformation; Elizabeth I; Renaissance and Elizabethan music and literature; the Stuarts; Colonialism; Commonwealth; Restoration; the Revolution of 1688; Reign of Anne.

**HIST 233** Dr. DeMichele
**England, 1714 to Present** 3 credits
Parliamentary rule; Cabinet government; Political parties; Industrial Revolution; nineteenth century reforms; building of a British Empire; World War I; problems of readjustment; World War II; Britain and the world today.

**HIST 236** Dr. Homer
**Modern Germany:** 3 credits
**Unification and Empire**
The 1815 Confederation; 1848 and the failure of liberalism; the Age of Bismarck; Wilhelm II and the "New Course," World War I and the Collapse of the Empire.

**HIST 237** Dr. Homer
**Modern Germany:** 3 credits
**The Twentieth Century**
The troubled birth of the Weimar Republic: the Ruhr Crisis; the Stresemann Era; economic collapse and the rise of Nazism; the Third Reich, and World War II; the two Germanies and the "economic miracle."

**HIST 238** Dr. Poulson
**(D)History of American** 3 credits
**Women: From Colonization to Mid-nineteenth Century**
A study of American women from the colonial era to the mid-nineteenth century. Changes in the family, the workforce, women's participation in politics and reform movements, and Native-American and African-American women.

**HIST 239** Dr. Poulson
**(D)History of American** 3 credits
**Women: From Mid-nineteenth Century to the Present**
A study of American women since the mid-nineteenth century. The effects of industrialization on the family, women's participation in the workforce, the Depression and the family, women and war, the feminist movement, and the conservative response.

**HIST 240** Dr. Domenico
**(D)Modern Italy** 3 credits
This course will examine major developments in Italian history from the Napoleonic invasion until current crises of the Republic. Important themes for discussion will be the unification movement, the liberal state, Fascism and anti-Fascist resistance, the postwar Republic, cultural and social change, and economic development.

**HIST 241** Dr. Shaffern
**Law in the Western Tradition** 3 credits
A survey of ideas about law in Western civilization from antiquity until the Civil War. Emphasis on the legal systems, such as the Hebrew, the Athenian, the Roman, the German, and the Catholic, that influenced the modern ideas about the law.

**HIST 295** Dr. DeMichele
**(C)Britain: Past and Present** 3 credits
(Prerequisite: any 100 level History course) Combines with travel experience in Great Britain to introduce the student to the major historical, cultural, political, economic and social events in Britain's past and present.

**HIST 310** Dr.Champagne
**Colonial America, 1607-1763** 3 credits
The European background of the Age of Discovery; the founding of the British-American colonies; their political, economic and cultural development; British colonial policy and administration; the development of an American civilization.

**HIST 311** Dr. Champagne
**American Revolution, 1763-1789** 3 credits
Background to the War for Independence; British imperial policy; the development of economic and ideological conflicts; the military contest; British ministerial policy and the parliamentary opposition; the Confederation; the formation of the Constitution.

**HIST 312** Dr. Champagne
**The Early National Period of American History, 1789-1824** 3 credits
Beginning of the New Government; politics and diplomacy in the Federalist Era; Jeffersonian Democracy; the War of 1812; nationalism and sectionalism, Marshall and the rise of the Supreme Court.

**HIST 313** Dr. Champagne
**The Age of Andrew Jackson, 1824-1850** 3 credits
Politics and society in the Jacksonian Era, slavery and the antislavery crusade, American expansion in the 1840's; the Mexican War; the emergence of the slavery issue.

**HIST 314** Fr. Masterson
**Civil War & Reconstruction** 3 credits
Crisis Decade, disintegration of national bonds; The War: resources, leadership, strategy, politics, monetary policy, diplomacy; Reconstruction: realistic alternatives, presidential and congressional phases, effects in the North and South.

**HIST 315** Dr. Kennedy
**American Progressivism, War, and Reaction, 1900-1929** 3 credits
(Prerequisites: HIST 110 and 111) American society from the age of Theodore Roosevelt and Woodrow Wilson to the "New Era" of the Roaring Twenties. Topics include Progressive reform movements, World War I and cultural conflict in the 1920's.

**HIST 316** Dr. Poulson
**(C)From Depression to Cold War: 1929-1960** 3 credits
A study of American society from the Great Depression to the election of 1960. The course will focus on the New Deal; American entry into World War II; the origins of the Cold War; and America in the age of "consensus."

**HIST 317** Dr. Hueston
**History of United States Immigration** 3 credits
(Prerequisites: HIST 110 and 111) A study of immigration to the United States with emphasis on the period from the Revolution to the restrictive legislation of the twentieth century. Motives and characteristics of immigration. Experiences of newcomers.

**HIST 318** Dr. Hueston
**A History of American Assimilation** 3 credits
(Prerequisites: HIST 110 and 111) The history of assimilation (or adjustment) of immigrants to American life. Nativism from pre-Civil War days to the 1920's. The "Old Immigration" and the "New Immigration" considered in the social, political, economic, and religious contexts of their eras. Special problems of the second generation from the 1850's to the 1960's.

**HIST 319-320** Dr. Shaffern
**Byzantine Civilization** 6 credits
The Byzantine Empire from its origins in the fourth century to its collapse in the 15th; the political and economic growth of the Empire with emphasis on its art and religion.

**HIST 321-322** Dr. Hueston
**American Ideas and Culture** 6 credits
(Prerequisites: HIST 110 and 111) History of American art, architecture, literature and thought; Colonial developments; the American enlightenment; the emergence of a national culture; Romanticism, post-Civil War; realism in American art and literature; the intellectual response to the industrial order; the American mind in the 1920's; the intellectual and cultural response to the Depression; post-World War II developments.

**HIST 323** Dr. Shaffern
**The Renaissance** 3 credits
A study of culture in Italy from the fourteenth to the sixteenth centuries. Humanism, art, historiography and politics will be emphasized.

**HIST 324** Dr. Shaffern
**The Reformation** 3 credits
The history of Europe during the era of religious revivalism (sixteenth century). The course will focus on the magisterial Protestant reformers, the Catholic Counter-Reformation and dynastic politics.

**HIST 325** Staff
**French Revolution to 1815** 3 credits
(Prerequisite: HIST 120) Historical antecedents; the philosophies; republicanism and the fall of the monarchy; Reign of Terror; the Directory; Napoleon; internal achievements; significance of the Spanish and Russian Campaigns; and War of Liberation.

**HIST 326** Dr. Homer
**Europe in the Age of Absolutism** 3 credits
(Recommended for Background: HIST 120) A study of the major political, social, economic and intellectual movements in Europe from the rise of royal absolutism until the outbreak of the French Revolution.

**HIST 327-328** Staff
**France, 1814-1940** 6 credits
France from the fall of Napoleon; the constitutional monarchies, the Second Republic, the Second Empire, and the Third Republic. The principal cultural movements of the period are covered, along with the political, social, and economic factors.

**HIST 330** Dr. Domenico
**Europe, 1815-1914** 3 credits
(Formerly HIST 329-330; Prerequisite: HIST 121) A study of nineteenth-century Europe concentrating on The Congress of Vienna and its aftermath, the Age of Nationalism and Realism, European Dynamism and the non-European world, and the Age of Modernity and Anxiety.

**HIST 331** Dr. Poulson
**(C)Recent U.S. History: 1960 to the Present** 3 credits
A study of American society since 1960. The course will focus on the New Frontier and Great Society; the Vietnam War; protest movements; Watergate; and the conservative response to these developments.

**HIST 332** Dr. Kennedy
**America in the Gilded Age, 1865-1900** 3 credits
(Prerequisites: HIST 110 and 111) American society in the age of industrialization and urbanization. Topics include the emergence of big business and labor conflict, immigration and the growth of cities, Populism, imperialism, and the Spanish-American War.

**HIST 333-334** Dr. Domenico
**Twentieth-Century Europe** 6 credits
World War I; Treaty of Versailles; Russia becomes the USSR; the European struggle for security; Italian Fascism; Rise of Nazi Germany; Asia between the two wars; World War II; loss of colonial empires in Africa and Asia; development of the Cold War; Marshall Plan and NATO.

**HIST 335** Staff
**World War II, Cold War and Detente** 3 credits
The diplomacy of World War II; the development of the Cold War between the U.S. and the U.S.S.R. and the adoption of the policy of detente.

**HIST 336** Atty. Rosenberg
**History of American Law** 3 credits
(Prerequisite: HIST 110 and HIST 111) Traces the history of ideas and concepts utilized by the courts, legislature, organized bar and administrative agencies to solve legal problems: and shows how American legal thought and reasoning developed from Colonial days to the present.

**HIST 337** Dr. DeMichele
**English Constitutional and Legal History** 3 credits
(Formerly H/PS 331-332) Anglo-Saxon basis; Norman political institutions; Magna Carta; beginnings of common law; jury system; Tudor absolutism; struggle for sovereignty; rise of House of Commons; democratic reforms; extension of administrative law.

**HIST 338-339** Dr. Hueston
**American Diplomatic History** 6 credits
(Formerly H/PS 319-320; Prerequisites: HIST 110 and 111) A study of American diplomatic history and principles. The Revolution. Early American policies on isolation and expansion. The War of 1812. The Monroe Doctrine. Manifest Destiny. The Civil War. American imperialism and the Spanish-American War. Latin American diplomacy in the twentieth century. World War I. Attempts to preclude further war. World War II. Cold War. Contemporary problems.

**HIST 340** Dr. Kennedy
**History of Urban America** 3 credits
(Prerequisites: HIST 110 and 111) The evolution of cities in the United States from the founding of colonial settlements to the end of the twentieth century. The nature of cities and urban life, the process and impact of urban growth, and the problems facing contemporary cities will all be considered.

**HIST 390** Staff
**History Internship** 3-6 credits
A practical work experience which exposes the student to the nature of historical investigation, analysis, and/or writing in a museum, historical site, or public agency. Supervision by faculty and agencies.

**HIST 490** Staff
**Seminar in European History** 3 credits
(Restricted to senior History majors and 4-year BA/MA History students) An analysis of selected topics in European history from the fifteenth to the twentieth century. Extensive readings. Historical research and writing stressed.

**HIST 491** Staff
**Seminar in American History** 3 credits
(Restricted to senior History majors and 4-year BA/MA History students) An analysis of selected topics in American history from the Colonial era to the present. Extensive readings. Historical research and writing stressed.

**GEOG 134** Dr. Conover
**(S)World Regional Geography** 3 credits
Introduces the major concepts and skills of geography. A regional approach stresses the five themes of geography including location, place, human environment interaction, movement and region.

**GEOG 217** Dr. Conover
**(D, S)Cultural Geography** 3 credits
(Formerly H/GEOG 217) Study of the influence of geography on the origin, structure, and spread of culture. Focuses on describing and analyzing the ways language, religion, economy, government and other cultural phenomena vary or remain consistent from place to place.

**IS 390** Staff
**Seminar in International Studies** 3 credits
(Formerly H/PS 390)) Required for International Studies majors. Other advanced undergraduates may take this course with permission of the professor. This course may be used for either History or Political Science credit.

# MATHEMATICS

*DR. JAKUB S. JASINSKI, Chairperson*

The mathematics program balances algebra vs. analysis in its basic courses and pure vs. applied mathematics (including probability and statistics) in its advanced courses. Supporting courses balance traditional physics with contemporary computer science. Graduates have great flexibility: some continue study in mathematics or related fields, some teach, some become actuaries and some work in jobs which vary from programming to management. A student chapter of the Mathematical Association of America encourages early professionalism.

**MINOR.** Mathematics minor must include MATH 114, 221, 222, and 351 and two additional electives chosen from mathematics courses numbered over 300 or PHYS 350.

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| MAJOR (GE QUAN) | MATH 142-114 | Discrete Structures-Analysis I | 4 | 4 |
| COGNATE | CMPS 134 | Computer Science I | 3 | |
| GE C/IL | C/IL 102 | Computing and Information Literacy | | 3 |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE PHIL-T/RS | PHIL 120-T/RS 121 | Intro. to Philosophy-Theology I | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE PHED | PHED | Physical Education | | 1 |
| | | | **17** | **17** |
| | | **SECOND YEAR** | | |
| MAJOR | MATH 221-222 | Analysis II-Analysis III | 4 | 4 |
| MAJOR | MATH 351 | Linear Algebra | | 3 |
| COGNATE (GE NSCI) | PHYS 140-141 | Elements of Physics I-II | 4 | 4 |
| GE S/BH | S/BH ELECT | Social-Behavioral Electives | 3 | 3 |
| GE T/RS-PHIL | T/RS 122-PHIL 210 | Theology II-Ethics | 3 | 3 |
| COGNATE | ELECT[2] | Elective | 3 | |
| | | | **17** | **17** |
| | | **THIRD YEAR** | | |
| MAJOR | MATH 446-Elective | Real Analysis I-Elective | 3 | 3 |
| MAJOR | MATH 448-Elective | Modern Algebra I-Elective | 3 | 3 |
| COGNATE | COGNATE ELECT [2] | Electives | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE ELECT | ELECT | Free Elective | 3 | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **16** | **16** |
| | | **FOURTH YEAR** | | |
| MAJOR | MATH ELECT [1] | Electives | 3 | 3 |
| MAJOR | MATH ELECT [1] | Electives | 3 | 3 |
| MAJOR | MATH ELECT [1] | Electives | 3 | |
| COGNATE | ELECT [2] | Electives | 3 | 3 |
| GE T/RS or PHIL | T/RS or PHIL | Elective | | 3 |
| GE ELECT | ELECT | Free Electives | 3 | 3 |
| | | | **15** | **15** |

**Total: 130 CREDITS**

[1] Electives for Mathematics majors: Major electives are selected from mathematics courses numbered above MATH 300; also PHYS 350, PHYS 351, CMPS 362 or CMPS 364. A student must select as an elective at least one of MATH 447 or 449, and at least two of MATH 312, 345, 460, 461. Additional courses numbered under MATH 300 may be taken as free electives but not as major electives.

[2] Cognate electives must be used to complete a minor, a concentration, a second major, secondary-education certification, or a package of courses pre-approved by the department.

**The results of the placement tests administered during freshman orientation assist students and their advisors in choosing the proper beginning-level mathematics sequence and the proper entry-level within that sequence. If a course is a prerequisite for a second course, directly or indirectly, and a student receives credit for the second course then that student will not be allowed to register for the prerequisite course.**

# BIOMATHEMATICS

The biomathematics major leads to employment or graduate study ranging from biostatistics through public health to medicine. The major contains four tracks: Epidemiology, Molecular Biology, Physiology, or Population Biology. Students interested in medical school should alter the standard schedule so that General Biochemistry can be elected in the third year. This may be done by attending summer sessions, by using AP credits, or—when approved by an academic advisor—by shifting General & Analytical Chemistry to the first year and Organic Chemistry to the second year.

| | Dept. and No. | Descriptive Title of Course | Credits FALL | SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| MAJOR | MATH 142-114 | Discrete Structures-Analysis I | 4 | 4 |
| MAJOR | BIOL 141-142 | General Biology I-II | 4½ | 4½ |
| GE C/IL | C/IL 102 | Computing and Information Literacy | | 3 |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 3 | 3 |
| GE PHIL-T/RS | PHIL 120 | Introduction to Philosophy | 3 | |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | | ½ |
| | | | **15½** | **15** |
| | | **SECOND YEAR** | | |
| MAJOR | MATH 221-222 | Analysis II-Analysis III | 4 | 4 |
| MAJOR | BIO ELECT[1]-379[2] | Track Electives-Biostatistics | 4½-5 | 3 |
| COGNATE | CHEM 112-113 | General & Analytical Chemistry | 4½ | 4½ |
| GE PHIL-T/RS | T/RS 121-122 | Theology I-II | 3 | 3 |
| GE PHIL-T/RS | PHIL 210 | Ethics | | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | ½ |
| | | | **17-17½** | **18** |
| | | **THIRD YEAR** | | |
| MAJOR | MATH 312-351 | Probability-Linear Algebra | 3 | 3 |
| COGNATE | CHEM 232-233 | Organic Chemistry I-II | 4½ | 4½ |
| COGNATE | PHYS 140-141 | Elements of Physics I-II | 4 | 4 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE ELECT | ELECTIVE | Electives | 3 | 3 |
| GE PHED | PHED ELECTIVES | Physical Education | ½ | ½ |
| | | | **18** | **18** |
| | | **FOURTH YEAR** | | |
| MAJOR | BIOL ELECT[1] | Track Elective | 3-5 | 3-5 |
| MAJOR | MATH ELECT[3] | Mathematics Elective | | 3-4 |
| GE HUMN | HUMN ELECT | Humanities Elective | 3 | 3 |
| GE S/BH | S/BH ELECT | Social-Behavioral Science Elective | 3 | 3 |
| GE PHIL-T/RS | PHIL-T/RS ELECT | Philosophy or Theology Elective | 3 | |
| GE ELECT | ELECTIVE | Elective | 3 | 3 |
| | | | **15-17** | **15-18** |

**Total: 131½ - 136½ CREDITS**

[1]Biology electives must all come from one track. Epidemiology Track: BIOL 260 or 371, BIOL 250, BIOL 344. Molecular Biology Track: BIOL 260, BIOL 361-362. Physiology Track: BIOL 245, two of BIOL 345, 347, 348, 349, 445, or 446. Population Biology Track: three of BIOL 370, 371, 375, or 472.

[2]MATH 314 can be substituted for BIOL 379 but only after MATH 312 has been completed.

[3]MATH 320 or 341: Both courses employ computer technology.

**MATH 005** Staff
**Algebra** 3 credits
A study of algebra including factoring, exponents, radicals, graphing, and linear and quadratic equations. Enrollment is restricted to Dexter Hanley College students who are limited in algebra skills. Permission of the dean of The Dexter Hanley College is required in order to enroll in this course. Credits count only as free elective.

**MATH 101** Staff
**(Q)Mathematics Discovery** 3 credits
Topics exploring various aspects of mathematical reasoning and modeling are selected by the instructor in the effort to bring the excitement of contemporary mathematical thinking to the nonspecialist. Examples of topics covered in the past in this course include fractal geometry, chaos theory, number theory, and non-Euclidean geometry. Not open to students with credit for or enrolled in any mathematics course numbered above 101.

**MATH 103** Staff
**(Q)Pre-Calculus Mathematics** 4 credits
An intensified course covering the topics of algebra, trigonometry, and analytic geometry. Not open to students with credit for or enrolled in MATH 109 or any calculus course.

**MATH 104** Staff
**(Q)Mathematics for Elementary Teachers** 3 credits
Development of the mathematical skills needed for teaching mathematics at the elementary level. Concepts, processes, and applications of elementary mathematics. Open only to Elementary Education, Special Education, and Early Childhood Education majors.

**MATH 106** Staff
**(Q)Quantitative Methods I** 3 credits
Topics from algebra including exponents, radicals, linear and quadratic equations, graphing, functions (including quadratic, exponential and logarithmic), and linear inequalities. Not open to students with credit for or enrolled in MATH 103 or MATH 109.

**MATH 107** Staff
**(Q)Quantitative Methods II** 3 credits
(Prerequisite: MATH 106 or equivalent) Topics from differential calculus including limits, derivatives, curve sketching, marginal cost functions, and maximum-minimum problems. Integration. Not open to students with credit for or enrolled in MATH 114.

**MATH 108** Staff
**Quantitative Methods III** 3 credits
(Prerequisite: MATH 107 or 114) Topics from integral calculus including the definite and indefinite integral, techniques of integration, and multivariable calculus. Not open to students with credit for or enrolled in MATH 221.

**MATH 109** Staff
**(Q)Quantitative Methods in the Behavioral Sciences** 4 credits
The mathematics necessary for elementary statistics: algebraic rules, logic, equations, functions, and linear regression. Particular attention paid to lines, parabolas, reciprocals, square roots, logarithms, and exponentials. Intended for students from psychology and related disciplines. Not open to students with credit for or enrolled in MATH 103.

**MATH 114** Staff
**(Q)Analysis I** 4 credits
(Prerequisite: MATH 103 or equivalent) The beginning of a twelve-credit sequence covering the topics of calculus and analytic geometry. Limits, derivatives, integration. Fundamental Theorem.

**MATH 142** Staff
**(Q)Discrete Structures** 4 credits
A study of symbolic logic, sets, combinatorics, mathematical induction, recursion, graph theory, and trees. Intended for Mathematics, Computer Science, and Computer Information Systems majors, but open to other qualified students.

**MATH 184-284-384-484** Staff
**Special Topics** 1-4 credits each
Topics, prerequisites, and amount of credit will be announced prior to preregistration.

**MATH 201** Staff
**(Q,W)Algebra and Environmental Issues** 3 credits
(Prerequisites: WRTG 106 or 107). Study of college algebra applied to environmental issues such as the concentration of carbon dioxide in the atmosphere. Modeling will include the use of algebra to analyze data and to predict future situations. Students will use written English as a tool to understand algebraic computations and to present and to interpret models based on scientific data. Recommended for non-science students, especially those in the Environmental Studies Concentration. This course is not open to students with credit for or enrolled in MATH 103, 106, 109, or any calculus course.

**MATH 204** Staff
**(Q)Special Topics of Statistics** 3 credits
Study of the computational aspects of statistics; hypothesis testing, goodness of fit; nonparametric tests; linear and quadratic regression, correlation and analysis of variance. Not open to students who have credit for or are enrolled in an equivalent statistics course (e.g., PSYC 210, MATH 312 or MATH 314).

**MATH 221** Staff
**Analysis II** 4 credits
(Prerequisite: MATH 114) Topics include: applications of the definite integral, transcendental functions, methods of integration, improper integral, parametric equations, polar coordinates, and indeterminate forms.

**MATH 222** Staff
**Analysis III** 4 credits
(Prerequisite: MATH 221) Topics include: infinite series, vectors, solid analytic geometry, multivariable calculus, and multiple integration.

**MATH 310** Staff
**Applied Probability and Mathematical Statistics** 4 credits
(Prerequisite: Math 221) Basic concepts of probability theory, random variables, distribution functions, multivariable distributions, sampling theory, estimation, confidence intervals, hypothesis testing, linear models and analysis of variance.

**MATH 312** Staff
**Probability Theory** 3 credits
(Prerequisite: MATH 221) Basic concepts of probability theory, random variables and their distribution functions; limit theorems and Markov chains.

**MATH 314** Staff
**Statistics** 3 credits
(Prerequisite: MATH 312) Measure of central tendency, measure of dispersion, continuous random variables, expected value, moments, confidence intervals, hypothesis testing, regression, and correlation.

**MATH 320** Staff
**Chaos and Fractals** 3 credits
(Prerequisite: One math course beyond MATH 221 and one CMPS course or equivalent experience) Study of chaotic dynamical systems and fractal geometry. Topics from discrete dynamical systems theory include iteration, orbits, graphical analysis, fixed and periodic points, bifurcations, symbolic dynamics, Sarkovskii's theorem, the Schwarzian derivative, and Newton's method. Topics from fractal geometry include fractal, Hausdorff, and topological dimension, L-systems, Julia and Mandelbrot sets, iterated function systems, the collage theorem, and strange attractors.

**MATH 325** Staff
**(W)History and Philosophy of Mathematics** 3 credits
(Prerequisite: MATH 222 and either Math 142 or a math course numbered above 300 or instructor's permission) A survey of major developments in mathematics from ancient through modern times. Students study the progression of mathematical creative thought from inception to rigorization then abstraction in order to develop an appreciation for the significance of these contributions and to gain a broader understanding of mathematics as a human endeavor. Topics may include the development of numeral systems, algebra, Euclidean and non-Euclidean geometry, calculus, number theory, real analysis, and the beginnings of logic and set theory.

**MATH 330** Staff
**Actuarial Mathematics** 3 credits
(Prerequisite: MATH 221) Theory of interest, accumulation and discount, present value, future value, annuities, perpetuities, amortizations, sinking funds, and yield rates.

**MATH 341** Staff
**Differential Equations** 4 credits
(Prerequisite: MATH 222) Treatment of ordinary differential equations with applications. Topics include: first-order equations, first-order systems, linear and nonlinear systems, numerical methods, and Laplace transforms. Computer-aided solutions will be used when appropriate.

**MATH 345** Staff
**Geometry** 3 credits
Euclidean, non-Euclidean, and projective geometry. Transformations and invariants.

**MATH 346** Staff
**Number Theory** 3 credits
(Prerequisite: MATH 114) Topics include divisibility, the Euclidean algorithm, linear diophantine equations, prime factorization, linear congruences, some special congruences, Wilson's theorem, theorems of Fermat and Euler, Euler phi function and other multiplicative functions, and the Mobius Inversion Formula.

**MATH 351** Staff
**Linear Algebra** 3 credits
(Prerequisite: MATH 221) Vector spaces, matrices, determinants, linear transformations, eigenvalues, eigenvectors, inner products, and orthogonality.

**MATH 360** Staff
**Coding Theory** 3 credits
(Prerequisite: MATH 351) A study of algebraic coding theory. Topics include: linear codes, encoding and decoding, hamming, perfect, BCH cyclic and MDS codes, and applications to information theory.

**MATH 446** Staff
**Real Analysis I** 3 credits
(Prerequisite: MATH 222) Topics include: the algebra and topology of the real numbers, functions, sequences of numbers, limits, continuity, absolute and uniform continuity, and differentiation.

**MATH 447** Staff
**Real Analysis II** 3 credits
(Prerequisite: MATH 446) Selections from: integration theory, infinite series, sequences and infinite series of functions, and related topics.

**MATH 448** Staff
**Modern Algebra I** 3 credits
(Prerequisite: MATH 351) Fundamental properties of groups, rings, polynomials, and homomorphisms.

**MATH 449** Staff
**Modern Algebra II** 3 credits
(Prerequisite: MATH 448) Further study of algebraic structures.

**MATH 460** Staff
**Topology** 3 credits
(Prerequisite: MATH 446) Topological spaces: connectedness, compactness, separation axioms, and metric spaces.

**MATH 461** Staff
**Complex Variables** 3 credits
(Prerequisite: MATH 222) The theory of complex variables: the calculus of functions of complex variables, transformations, conformal mappings, residues and poles.

**MATH 462** Staff
**Vector Calculus** 3 credits
(Prerequisites: MATH 222 and 351) The calculus of scalar and vector fields and of functions defined on paths or surfaces. Implicit Function, Green's, Strokes, and Gauss' Theorems. Applications.

**INTD 224** Dr. Dutko
**(Q, W)Science, Decision-Making, and Uncertainty** 3 credits
See description under interdisciplinary courses, p. 216, in this catalog.

# MILITARY SCIENCE

*LTC. RUSSELL POLING*

## Army Reserve Officer Training Corps (ROTC)

The objective of the Military Science program is to develop leadership skills. The Military Science program at the University of Scranton was selected as the "Best Unit" for 1997 in the First ROTC Region that encompasses the entire eastern third of the United States.

ROTC is a totally flexible program that can be tailored to any students, especially those in their freshman and sophomore years. Military Science instruction for University of Scranton students is offered on-campus, through the Military Science Department. Two-year and four-year programs are offered, both of which lead to a commission as an officer in the United States Army. To obtain this commission, qualified male and female students must pass a physical examination and complete either the two-or four-year program of approved Military Science courses. Most students take one course per semester of the basic course program (freshman and sophomore years), and one course per semester of the advance courses (junior and senior years). All contracted students in the advanced courses (junior and senior years) will receive a $150 per month subsistence allowance. Many of the students win Army ROTC scholarships. Uniforms, equipment, and textbooks required for Army ROTC classes will be supplied by the Military Science Department.

Students (juniors/seniors/graduate students) qualify for entry into the Advance ROTC course in three ways:

1. On-Campus Courses: Most students take the introductory military-science courses of the basic military-science program on-campus during their freshman and sophomore years. This allows them to participate in adventure training, and to learn about the opportunities and responsibilities of being an Army officer without incurring any obligation.
2. Summer Programs: Students may also qualify through a paid, five-week, no-obligation summer training session held in Fort Knox, Kentucky, which provides intensive military training equivalent to the instruction received by freshmen and sophomores in the basic course program.
3. Advanced Placement: Students with any prior military service, members of the United States Army Reserves or National Guard, or former Junior ROTC members may qualify for advanced placement into the advanced Army ROTC program.

**TWO-YEAR PROGRAM:** Available to qualified full-time students (generally having a minimum of two academic years remaining to degree completion) who meet the criteria set forth in paragraphs (2) or (3) above. Application for this program should be made prior to the end of the spring semester of the sophomore year for those students not previously enrolled in Military Science instruction. Also available for graduate students.

**FOUR-YEAR PROGRAM:** Consists of attending the freshman and sophomore courses; students can begin as late as the fall semester of their sophomore year if approved by the department chairman. Enrollment in the first four courses of Military Science is accomplished in the same manner as any other college course and carries no military obligation for non-scholarship students. Application to enroll in the Advanced Military Science courses should be made while the student is enrolled in Military Science 202.

Each student is required to complete a paid, five-week Advanced Training Camp at Fort Lewis, near Seattle, Washington, normally after completing Military Science 302, in

his or her junior year. Transportation, food, lodging, and medical and dental care are provided in addition to base pay.

**SCHOLARSHIPS:** There are significant scholarship opportunities for ROTC students. Scholarships pay up to $16,000 for tuition, $450 for books, and $1500 for spending money each year. Freshmen and sophomores can apply for three- and two-year full scholarships in January. Historically most University of Scranton students win scholarships by their junior year.

Winners of full, high-school level, ROTC scholarships are provided free room and board by the University of Scranton.

**PARTNER IN NURSING EDUCATION (PNE):** In 1996, the Army designated the University of Scranton as a PNE and sends five high-school-level ARMY ROTC Nursing Scholarship recipients to Scranton annually. Additionally, Nursing students who complete the Army Nurse Summer Training Program (NSTP) receive three credits on their transcript towards NURS 482 lab.

**TRANSCRIPT CREDIT:** Up to 15 Military Science credits can be counted on the transcript. Additionally, Physical Fitness Training (PHED 138) can count for the three required Physical Education credits and nurses receive three credits toward senior-year clinicals for Army NSTP.

## MINOR IN LEADERSHIP

Leadership is the ability to get things done through others. American Military Leadership emphasizes total competence in one's field, coupled with an absolute respect for ethics. It is based on the knowledge of people, history, and current management practices. The Military Science Department offers a minor in Leadership that capitalizes on the classroom instruction offered in the above topics provided by several University departments. The minor also offers unique field experiences for students to practice leadership skills in demanding yet safe and controlled training activities. The minor is open to all University students.

A minor in Leadership requires 18 credits, at least six of which must be approved electives outside of the Military Science department. The student must take MS 301, MS 302, MS 401, amd MS 402, plus courses from the list of approved electives and must complete a University internship approved by the instructor of record, the Professor of Military Science. The student may choose electives from the following approved courses:

| | | | | | |
|---|---|---|---|---|---|
| CJ 237 | HIST 220 | MGT 471 | PHED 138 | PS 327 | |
| | GEOG 134 | HIST 223 | MGT 490 | PS 130,131 | PS 329 |
| | HIST 214 | HIST 239 | MS 101, 102 | PS 213 | PSYC 220 |
| | HIST 216 | INTD 103 | MS 201, 202 | PS 227 | PSYC 236 |
| | HIST 218 | MGT 351 | MS 480 | PS 231 | PSYC 284* |
| | HIST 219 | MGT 352 | MS 481 | PS 232 | S/CJ 234 |

The student must receive a grade of "C" or better in each course in order for it to count towards the minor, and the student must have an average of 3.0 in the courses counting toward the minor.

*Special Topics: Behavior Modification

**MS 101-102** Staff
**Concepts of** 2 credits
**Leadership I & II**
Instruction is designed to provide a very basic understanding of military knowledge while concentrating on the leadership skills and civic responsibilities important to all citizens. Students may elect to participate in many activities that produce expertise in rappelling, orienteering, first aid, swimming and marksmanship.

**MS 111-112** Staff
**Leadership Applications** 0 credits
**Laboratory**
Freshmen and sophomores are encouraged to participate in this elective. "Hands-on" instruction is designed to reinforce classroom training on weapons, first aid, tactics, leadership and military drill.

**MS 131-132** Staff
**Advanced Leadership** 0 credits
**Applications Laboratory**
Advanced-course junior/senior students are required to attend. Hands-on reinforcement of classroom leadership training and military instruction is conducted. Students plan, resource and conduct the training under the supervision of regular army sergeants and officers. Juniors are tested in situations similar to those they will experience at their advanced summer camp.

**MS 201-202** Staff
**Dynamics of** 4 credits
**Leadership I & II**
Instruction is designed to familiarize the student with basic military operations and the principles of leadership. Students experience hands-on training with navigation and topographic equipment, first aid and military weapons.

**MS 301-302** Staff
**Military Leadership I & II** 3 credits
(Prerequisite: MS 201-202, or equivalent)
Instruction is designed to continue the development of leadership qualities and technical skills required in the military. Students teach freshmen and sophomores to use equipment and are graded in positions of responsibility. Students learn to plan, resource and execute effective training. The goal of the junior year is to prepare students to excel at the advanced summer camp prior to their senior year. (2 credits are awarded for MS 301, 1 credit for MS 302.)

**MS 401-402** Staff
**Advanced Military** 3 credits
**Leadership**
Instruction is designed to prepare students to function as members of a military staff and concurrently continues leadership development. The Professor of Military Science teaches this course and mentors students prior to their first military assignment. The course covers briefing techniques, effective writing, army training systems, and the logistical and administrative support of military operations. (2 credits are awarded for MS 401, 1 credit for MS 402.)

**MS 480** Staff
**Internship in** 2 credits
**Military Science**
**Advanced Leadership Camp**
(Prerequisites: MS 301, MS 302, contracted status as a cadet) The Internship is a five-week experience of training and evaluation conducted at Fort Lewis, Washington. It gives the student the opportunity to practice the leadership theory acquired in the classroom. Each student executes at least seven major leadership missions and receives critique and mentoring continuously. ROTC cadets from all across the country participate. Students will spend at least 400 hours in the field. There is no cost to the student.

**MS 481** Staff

**Internship in Military Science Cadet Troop Leading** 1 credit

(Prerequisites: MS 301, MS 302, contracted status as a cadet) The Internship is a three-week experience of leadership training and mentoring as an understudy to a military officer in a US Army troop unit. It gives the student the opportunity to lead real soldiers responsible for a military mission. The intern will actually supervise the planning and execution of the unit's scheduled training. The intern receives continuous assessment and mentoring. Students spend at least 200 hours in the field. There is no cost to the student.

**PHED 138** Staff

**Physical Fitness Training** 1 credit

A modern up-to-date program of fitness and health training. The one-hour sessions are conducted before classes on Mondays, Wednesdays, and Fridays. The routine consists of stretching and warm-ups, followed by strengthening exercises, and concluding with an aerobic workout. There is a wide variety of activities including running, aerobics, swimming, gymnastic sports, weight lifting and the "Army Daily Dozen." Safety is a prime concern and all sessions are supervised by senior military sergeants and officers. This course is designed (but not required) to be counted toward the three-credit PHED requirement during the junior and senior years. This course may be audited and is open to all students.

**NOTE:** Candidates for an Army commission through Military Science are required by regulation to complete academic courses in the areas of communications skills, military history, and computer literacy. Generally, these requirements will be met by satisfying the University's general-education requirements. Contact the professor of Military Science for specific requirements.

# NEUROSCIENCE

*DR. TIMOTHY CANNON, Director*

The foundation courses of this interdisciplinary curriculum are selected from the Biology, Psychology, and Chemistry departments. Depending upon the electives chosen, the program can prepare students for a variety of graduate programs within the field of neuroscience. Such graduate training may draw from a range of disciplines, including biology, psychology, anatomy, pharmacology, toxicology, biophysics, biochemistry and medicine. Students have ample research opportunities in laboratories that can support a diversity of behavioral, biochemical, neurophysiological and neuroanatomical investigations. The program is administered by an interdisciplinary committee.

| | Dept. & Number | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **SPRING** |
| MAJOR (GE NSCI) | BIOL 141-142 | Gen. Biology I-II | 4½ | 4½ |
| COGNATE | CHEM 112-113 | Gen. Analytical Chem. I-II | 4½ | 4½ |
| MAJOR (GE S/BH) | PSYC 110 | Fundamentals of Psychology | 3 | |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE C/IL | C/IL 102 | Computing and Information Literacy | | 3 |
| GE T/RS | T/RS 121 | Theology I | | 3 |
| | | | **16** | **18** |
| | | **SECOND YEAR** | | |
| MAJOR | BIOL 348 | Neurophysiology | | 3 |
| MAJOR | ELECT | Major Elective | | 3 |
| MAJOR | PSYC 231 | Behavioral Neuroscience | 4½ | |
| MAJOR | PSYC 210-330[1] | Psych. Statistics-Research Methods in the Behavioral Sciences | 3 | 5 |
| COGNATE (GE QUAN) | MATH 114 | Analysis I | 4 | |
| GE T/RS-PHIL | T/RS 122-PHIL 120 | Theology II-Intro. to Phil. | 3 | 3 |
| GE HUMN | ELECT | Humanities Elective | 3 | |
| GE PHED | PHED ELECT | Physical Education | 1 | 2 |
| | | | **18½** | **16** |
| | | **THIRD YEAR** | | |
| MAJOR | MAJOR ELECT | Major Electives | 6-8 | 3-4 |
| COGNATE | COGNATE ELECT | Cognate Electives | 6-8 | 6-8 |
| GE PHIL | PHIL 210 | Ethics | 3 | |
| GE HUMN | HUMN ELECT | Humanities Elective | | 3 |
| GE S/BH | S/BH ELECT | Soc./Beh. Sciences Elective | | 3 |
| | | | **15-19** | **15-18** |
| | | **FOURTH YEAR** | | |
| MAJOR | MAJOR ELECT | Major Elective | 3-4 | |
| COGNATE | COGNATE ELECT | Cognate Electives | 6-8 | |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE PHIL or T/RS | PHIL or T/RS | Elective | | 3 |
| GE ELECT | ELECT | Free Electives | 3 | 12 |
| | | | **15-18** | **18** |
| | | | **Total: 131½-141½ CREDITS** | |

[1] PSYC 330 fulfills one of the writing-intensive requirements of the general-education program.

**MAJOR:** Total credits 42½-46½. Majors must take two electives from both Biology and Psychology. Psychology electives must be drawn from PSYC 220, PSYC 221, PSYC 222, PSYC 225, PSYC 230, PSYC 234, PSYC 235, or, with permission of the director, PSYC 284, or 384. Biology electives must be drawn from those intended for Biology majors. With permission of the director, Special Topics in Neuroscience (NEUR 384) may be used to fulfill one Psychology or Biology elective requirement.

**COGNATE:** Total credits 28-33. Students should consider their projected graduate program when choosing cognate electives from the areas of chemistry, mathematics, physics, and computer science.

**NEUR 384**
**Special Topics**
**in Neuroscience**
(Formerly NEUR 170; Prerequisites: BIOL 141-142 and PSYC 231) Course topics are developed by individual faculty to provide in-depth coverage of specific areas in neuroscience. Some courses have required or elective laboratory components. Course titles and descriptions will be provided in advance of registration.

**NEUR 493-494** **Staff**
**Undergraduate Research** 3-6 credits
**in Neuroscience**
(Formerly NEUR 160-161; Prerequisites: BIOL 141-142, PSYC 231, PSYC 330, and permission of professor) Individual study and research on a specific topic relevant to neuroscience under the supervision of a faculty member. It is strongly recommended that this research be initiated during the junior year, and it is expected that the research will extend over a two-semester period.

# PHILOSOPHY

*DR. WILLIAM V. ROWE, Chairperson*

The basic objectives of the Philosophy Department may be stated as follows:

1. To inspire the student to confront the philosophical problems implicit in the experience of self, others and the universe, together with the question of their relations to ultimate transcendence (God and immortality);

2. To develop in the student habits of clear, critical thinking within the framework of both an adequate philosophical methodology and accepted norms of scholarship;

3. To introduce the student to reading critically the great philosophers, past and present; and

4. Finally, to help the student to formulate for himself or herself a philosophy of life or world-view consistent with the objectives of liberal education at a Catholic university.

For the Bachelor of Arts degree in Philosophy, the major must take 24 credits (eight courses) in Philosophy in addition to the six required of all students. These 24 credits must include a logic course and at least two courses on the 300 or 400 level. Majors should take logic before the senior year.

See also the Philosophy offerings in the SJLA Program described elsewhere in this catalogue.

**MINOR.** A minor in philosophy consists of 18 credits--the six credits required of all students and 12 additional credits. Six distinct philosophy minors are available; the traditional open minor, a minor in Ethical Issues of Professional Life, a minor in Philosophy and Commercial Life, a Pre-Law minor in philosophy, a minor in the History of Philosophy, and a minor of Philosophy and Science. Course listings for specific minors are available on the Philosophy Department web page or in the Philosophy Department office

PHIL 120, Introduction to Philosophy, is a prerequisite for PHIL 210, Ethics.
PHIL 210 is a prerequisite for all other philosophy courses.

**PHIL 120** Staff
**Introduction to Philosophy** 3 credits
The aim of this course is to awaken in the student an appreciation of the nature and method of philosophical inquiry through an examination of key texts that grapple with central questions in the history of philosophy.

**PHIL 210** Staff
**Ethics** 3 credits
(Prerequisite: PHIL 120) A critical examination of fundamental moral issues through close readings of seminal texts spanning the history of philosophy from ancient Greece to the present. The ethical theories of such philosophers as Plato, Aristotle, Augustine, Aquinas, Kant and Mill may be examined as major representatives of the Western philosophical tradition. Themes to be explored may include happiness, virtue, the nature of justice, free choice, conscience, natural law and obligation, God and morality.

**PHIL 211** Dr. Black
**(P)Business Ethics** 3 credits
This course is an application of standard philosophical principles and theories to the critical study of questions, issues, and problems that surround the moral conduct of business. Recommended for business majors.

**PHIL 212** Dr. Baillie, Fr. McKinney
**(P)Medical Ethics** 3 credits
(Prerequisite: PHIL 210) The course will introduce the student to the presence of basic ethical concerns in the practice and distribution of health care. The course will emphasize both current scholarship and the practical nature of the subject through the discussion of medical cases, ethical theories, and current readings. Recommended for those interested in the health care professions.

# PHILOSOPHY

| | Dept. and No. | Descrptive Title of Course | Credits FALL | SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| MAJOR (GE PHIL) | PHIL 120-210 | Introduction to Philosophy-Ethics | 3 | 3 |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | | 3 |
| GE HUMN | HUMN ELECT | Electives | 3 | 3 |
| GE QUAN | QUANT ELECT | Elective | 3 | |
| GE NSCI | NSCI ELECT | Elective | 3 | |
| GE S/BH | S/BH ELECT | Elective | | 3 |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **16** | **16** |
| | | **SECOND YEAR** | | |
| MAJOR (GE PHIL) | PHIL 200 or 300 level | Second-year Electives | 3 | 3 |
| GE T/RS | T/RS 121-122 | Theology I & II | 3 | 3 |
| GE HUMN | FOR LANG[1] | Electives | 3 | 3 |
| GE S/BH | S/BH ELECT | Elective | 3 | |
| GE NSCI | NSCI ELECT | Elective | | 3 |
| GE ELECT | ELECT | Electives | 3 | 3 |
| GE PHED | PHED ELECT | | 1 | 1 |
| | | | **16** | **16** |
| | | **THIRD YEAR** | | |
| MAJOR | PHIL 200 or 300 level | Third-year Elective | 3 | 6 |
| COGNATE | ELECT[2] | Electives | 9 | 9 |
| GE ELECT | ELECT | Electives | 3 | 3 |
| | | | **15** | **18** |
| | | **FOURTH YEAR** | | |
| MAJOR | PHIL 300 or 400 level | Fourth-year Courses | 6 | 3 |
| COGNATE | ELECT[2] | Electives | 9 | 9 |
| GE ELECT | ELECT | Electives | 3 | 3 |
| | | | **18** | **15** |
| | | | | **Total: 130 CREDITS** |

[1] Foreign language is recommended by department.

[2] In the Cognate area of 24 hours, the department requires that 12 credits be focused in one field. It should be noted that six credits not required by the department in the major area are added to the free area in senior year. These may be taken in any field including Philosophy.

**PHIL 213** Dr. Casey
**(P)Environmental Ethics** 3 credits
(Prerequisite: PHIL 210) An introduction to environmental philosophy and the various ethical responses to the ecological crisis of the late twentieth century. Examines such issues as biocentrism vs. anthropocentrism, the relation between culture and nature, the environmental ethical debate.

**PHIL 214** Dr. Nordberg
**(P)Computers and Ethics** 3 credits
(Prerequisite: PHIL 210) The computer revolution raises new ethical problems and presents novel aspects of traditional ethical issues. Ethical aspects of hacking, software piracy, computer-aided decision-making, protection of software by copyright, patent, trade-secret laws, unauthorized use of computer resources, privacy and data-base security, program warranties and programmer responsibility, artificial intelligence, the interface between human and computer.

**PHIL 215** Drs. Casey, Pang-White
**(P)Logic** 3 credits
An introduction to logic as the science of argument including the nature of arguments in ordinary language, deduction and induction, truth and validity, definition, informal fallacies, categorical propositions and syllogisms, disjunctive and hypothetical syllogisms, enthymemes, and dilemmas.

**PHIL 218** Dr. Meagher
**(D)Feminism:** 3 credits
**Theory and Practice**
In this course we will explore the relationship between feminist analyses of sexism and political practices aimed at eliminating it. To this end we will examine diver-

gent political traditions and show ways in which feminists have criticized, appropriated, and made use of them in their own work. Special attention will be paid to the interrelationship of gender, class and race. This course may be counted toward the Women's Studies Concentration.

**PHIL 219** Staff
**Russian Philosophy** 3 credits
This course will trace the evolution of Russian philosophical thought. The offering will concentrate on select nineteenth-and twentieth-century authors and will also highlight several grand themes dear to Russian philosophers, including integral knowledge, the philosophy of history, Godmanhood and Sophia. Consideration will be afforded both religious and non-religious thinkers.

**PHIL 220** Dr. Baillie
**(P)Ancient Philosophy** 3 credits
The Pre-Socratics, Plato, Aristotle and their immediate successors. Special emphasis on the theory of knowledge, the metaphysics and philosophical anthropology of Plato and Aristotle.

**PHIL 221** Dr. Pang-White
**(P)Medieval Philosophy** 3 credits
PHIL 221 is a survey of philosophy in the European Middle Ages. We will focus on the connections between medieval philosophy and its classical and Christian sources, on questions concerning nature/grace, reason/faith, theology/philosophy, and on the nature and ethos of scholasticism.

**PHIL 222** Dr. Nordberg
**(P)Modern Philosophy I** 3 credits
Renaissance background: Petrarch and the humanist movement; Galileo and the beginnings of modern science; Descartes: mathesis universalis; the difficulties of the Cartesian method; solution in the one substance of Spinoza; British Empiricism: Locke and the problem of substance, Berkeley's '*Esse est percipi*,' culmination in Hume and the doctrine of perceptual atomism.

**PHIL 223** Fr. Mohr
**(P)Modern Philosophy II** 3 credits
The development of idealism in the thought of Kant, Fichte, Schelling, and Hegel, with its influence on Feuerbach, Marx, Engels, and Kierkegaard. Special consideration of dialectical thinking in its resolution of the antitheses of reality and appearance, freedom and necessity, infinite and finite, and faith and knowledge.

**PHIL 224** Dr. Fairbanks
**(P)Foundations of** 3 credits
**Twentieth-Century Philosophy**
A study of some of the key figures that have set tone for the twentieth-century philosophy. Buber, Marx, Kierkegaard, Hume and Russell are studied in detail.

**PHIL 226** Drs. Pang-White, Black
**(D, P)Chinese Philosophy** 3 credits
An introduction to the classical and modern Chinese understanding. The course will focus on the Daoist's teachings and vision, the modifications made to Daoism by Buddhism, and the thought of Confucius and the Neo-Confucians. Included in the course will be comparisons and contrasts with Western thought and some discussion of Japanese Buddhism. The topics of the course will include ethics, social life, mysticism, religion and reality.

**PHIL 227** Dr. Klonoski
**(P)Political Philosophy** 3 credits
Philosophical and ethical analysis of the social nature of man with emphasis on modern social questions. Ethics of the family, of nation and of communities. International ethics.

**PHIL 229** Fr. Mohr, Dr. Rowe
**(D,P)Philosophy of Religion** 3 credits
An investigation of the main topics which have emerged in philosophers' reflections on religion: arguments for the existence of God; the possibility of statements about God; assessment of religious experience; the notions of miracle, revelation, immortality and afterlife; the problem of evil; relations between religious faith and reason; religion and ethics. Selected reading from classical and contemporary authors.

**PHIL 231** Staff
**Philosophy of Women** 3 credits
This course reviews the philosophies of woman in western thought from Plato and Aristotle to Nietzche, Schopenhauer, and Beauvoir. It concludes with an interdisciplinary selection of readings on women to be addressed philosophically in art, anthropology, literature, politics, theology, psychology, etc.

**PHIL 232** Staff
**Idea of a University** 3 credits
An investigation of the philosophy of a liberal education, using John Henry Newman's *Idea of a University* as a tool.

**PHIL 234** Fr. Mohr
**(P)Existentialism** 3 credits
A critical study of selected works of Kierkegaard, Jaspers, Marcel, and Sartre, with special emphasis on the existentialist themes of selfhood, freedom, dread, responsibility, temporality, body, limited and unlimited knowledge and reality, and fidelity to community.

**PHIL 235** Dr. Fairbanks
**(P)New Directions in Philosophy** 3 credits
The purpose of this course is to focus on very recent works of philosphical value that open new avenues of intellectual reflection. Books and video tapes are updated regularly.

**PHIL 236** Dr. McGinley
**(P)Freud and Philosophy** 3 credits
Examination of overt and covert philosophical implications of Freud's system of psychoanalysis. Emphasis on actual writings of Freud, particularly after 1920.

**PHIL 237** Dr. Fairbanks
**(P)The Philosophy of Multiculturalism** 3 credits
The purpose of this course is to focus on important philosophical ideas that are diverse, cross-cultural and global in their content and application. Specifically, the course summarizes and discusses basic philosophical articles and selected video tapes that complement traditional western concepts. Secondly, students are encouraged to develop their own critical reactions concerning these global philosophical issues.

**PHIL 238** Dr. Klonoski
**(P) Philosophical Reflections on Commercial Life** 3 credits
This course will engage in a philosophical reflection on commercial life. Commerce as a human artifact and activity will be studied, and the relationship of commercial life to and the effect on human nature, human development and human perfection will be discussed. The fundamental question of whether commercial life is "natural" to human beings will be explored. The character of commercial society will also be examined including important components of such a society as, e.g., money property, wealth, labor and markets. Classic texts by writers such as Plato, Aristotle, St. Thomas More, John Locke, Bernard Mandeville, David Hume, Adam Smith, James Madison, Karl Marx, Marcel Mauss, George Bataille, Hannah Arendt, Daniel Bell and Jean Baudrillard.

**PHIL 310** Dr. Casey
**(P)Epistemology** 3 credits
An introduction to the theory of knowledge and its related concerns. This will involve close readings of historical texts from ancient to contemporary philosophy that are considered representative of the dominant epistemological theories in the Western tradition. Topics include sensation, perception, memory, recollection, reason, language and the body. The unifying theme of the course will be the historical importance of imagination and the role it plays in knowing.

**PHIL 311** Drs. Baillie, McGinley
**(P)Metaphysics** 3 credits
A textual inquiry into the adequacy of philosophers' answer to the fundamental question, "What is?" Special attention will be given to Plato, Aristotle, Aquinas, Kant's critical philosophy and the issues of nature and history.

**PHIL 312** Dr. Rowe
**(P)Modern Philosophy III** 3 credits
This course is a study of four figures in nineteenth century philosophy: Hegel, Kierkegaard, Marx and Nietzsche. We will consider such issues as the relation

between philosophy and non-philosophical experience, the place of philosophy in society, the theme of conflict in life and thought, and the simultaneous spread and decay of humanism in the nineteenth century.

**PHIL 313** Dr. Klonoski
**(P)Philosophy and Friendship** 3 credits

This course will be an historical survey of primary texts which discuss friendship. Readings in the course will be taken from authors of the ancient, medieval, modern and contemporary periods in the history of philosophy. Some of these authors whose works will be discussed are, Xenophon, Plato, Aristotle, Cicero, Augustine, de Montaigne, Bacon, Kant, Emerson, Nietzsche, Gray, Arendt and Sartre.

**PHIL 314** Dr. Meagher
**Philosophy and the City** 3 credits

This course allows students to explore philosophical issues connected to urban and public policy as a way of developing a deeper understanding of their own relation to the city and their roles as citizens. The course will analyze the city as a site of tension between community and difference, as a space of public citizenship, and as built environment that reflects human connection to art and nature.

**PHIL 315** Dr. Baillie
**(P)Twentieth-Century Political Philosophy** 3 credits

This course is a survey of modern social contract theory and its relation to capitalism, and of modern Marxism. Issues raised will include obligation and consent, equality, freedom and self-determination, the role of markets, and the role of the state.

**PHIL 319** Fr. McKinney
**Philosophy of Law** 3 credits

A study of the various justifications of law and their implications. Special consideration will be given to the problems of civil disobedience and the force of law in private institutions.

**PHIL 320** Dr. Black
**(P)Aesthetics** 3 credits

The main theories of the essential character of beauty or art, how they are judged, how they are related to the mind and the whole person, how they are created and how this creativity expresses a commitment to oneself and to the world.

**PHIL 321** Dr. Nordberg
**Great Books** 3 credits

Major thinkers in the Western philosophical, religious, political and literary traditions. This course emphasizes philosophical themes in literature.

**PHIL 325** Dr. Meagher
**(P)Literature and Ethics** 3 credits

This course examines that "old quarrel between philosophy and literature," the dispute between Plato and Ancient Athenian poets regarding the source of morality, and studies how this quarrel continues in contemporary moral discourse. The aims of this course are to: (1) gain a better understanding of issues in contemporary moral thinking, especially regarding so-called "narrative approaches to ethics"; and (2) rethink the "old quarrel," as we examine contemporary philosophers' turns to literature in an attempt to reconstruct the concept of moral agency.

**PHIL 326** Dr. Meagher
**(D, P)Advanced Topics in Feminist Philosophy** 3 credits

(Prerequisite: PHIL 218, other women's studies courses, or permission of the instructor.) This course will explore a special topic in feminist philosophy. The topic will vary according to student and faculty interest. Possible topics might include: feminism and aesthetics, issues of equality, philosophy of women. Course might be repeated as topics vary. This course may be counted toward the Women's Studies Concentration.

**PHIL 327** Dr. McGinley
**Readings in the Later Plato** 3 credits

A survey and contextualization of the dialogues usually said to be "Later" in Plato's intellectual development will precede a textually based examination of those dialogues in which Plato's dialectic turns on the "concept" of difference. Thaetetus, Sophist, and Parmenides will be emphasized.

**PHIL 328** Dr. Meagher
**(P)Philosophy of Literature** 3 credits

This course examines the nature of literature, and its relation to philosophy and political life. Students will study both classical texts on literature and contemporary Anglo-American examinations and appropriations of them, as well as recent European literary theory.

**PHIL 330** Fr. McTeigue
**(P)Fate, Destiny & Dignity** 3 credits

This course will use historical and contemporary philosophical texts to begin a discussion of human nature in terms of: 1) absolute origin--creature of God vs. evolutionary accident; 2) ultimate destiny--is death the end of human life? 3) may we still talk about the soul? 4) persons--public & private, accompanied and alone. Throughout the course, students will be seeking to position themselves to answer the question, "What must be true of human nature for friendship and love to be possible?

**PHIL 331** Dr. Casey
**Feminist Philosophy of Science** 3 credits

A feminist critique of both the alleged value-free character of modern science and the positivist philosophy of science supporting this view. The course thus focuses on feminist arguments for the contextual, i.e., social, political and economic, nature of science and the resulting need to rethink such key concepts as objectivity, evidence and truth in light of androcentrism and gender bias. Consideration is also given to critical responses from feminist and nonfeminist defenders of more traditional accounts of science.

**PHIL 340** Dr. Rowe
**(D)Philosophy and Judaism** 3 credits

In a setting that witnessed both the destruction of European Jewery and the end of Jewish Diaspora through the creation of the State of Israel, Jewish philosophers wrote and spoke with a distinct, yet universal voice. This course is a survey of Jewish philosophical writing in this context, with a focus upon the specific ways Judaism and philosophy may be related and were related in the 20th century. Under the heading of 'philosophy ***and*** Judaism, our study will disclose a philosophizing 'about' Judaism, a philosophizing 'from out of' Judaism, and a philosophizing 'for' Judaism.

**PHIL 410** Dr. Black
**(P)Philosophy of Culture** 3 credits

Examines the meaning of the term "culture." Explores the notions of civilization and barbarism, common principles in cultural development, and the interaction of such cultural forces as myth, magic, language, art, religion, science, and technology. Special attention will be given to the question of "progress" and "regress" in culture.

**PHIL 411** Dr. Pang-White
**(P)Thomas Aquinas: Philosophy and Controversy** 3 credits

This course is a contextual survey of the philosophy of Thomas Aquinas, arguably the greatest thinker of the thirteenth century, the golden age of Scholasticism. Selection of topics from his metaphysics, ethics, and anthopology will be examined. Topics may include but are not limited to: Aquinas' distinction between existence and essence, his synthesis of Aristotelian philosophy, Avicennian metaphysics (an Arabian philosophy), and Christianity, his doctrine on faith and reason, his dispute with the Averroists on the status of the intellect, the condemnation of some of his propositions in 1277, and his later canonization in 1325.

**PHIL 414** Dr. Rowe
**(D, P)Philosophy of Emmanuel Levinas** 3 credits
This course is a study of the twentieth century Jewish philosopher, Emmanuel Levinas. We will focus on Levinas' theory of ethical experience, an account that takes its categories from both Greek and Hebrew sources, thereby enriching the dialogue between Jewish and Christian traditions in philosophy.

**PHIL 415** Fr. McTeigue
**(P)Philosophy of God** 3 credits
This course will use classic and contemporary texts to begin a discussion of evil as a challenge to traditional notions of the existence, power, wisdom, and goodness of God. We shall also consider whether hope is an intellectually honest response to the problem of evil.

**PHIL 418** Dr. Casey
**(P)Phenomenology** 3 credits
An introduction to phenomenology, which is a critical methodological approach to human experience. This twentieth century European movement will be examined through selected works of Husserl, Heidegger, Sartre, and Merleau-Ponty. The intent of the course is to explore phenomenology both as a theoretical approach to the study of human consciousness and the lived-world and as a unique philosophical method.

**PHIL 420** Dr. Black
**(P)Philosophy of Rhetoric** 3 credits
A systematic investigation of the form, meaning and influence of rhetoric. Explores the relationships between topic and metaphor, logic and narration, ethos and logos, conscience and persuasion. Special attention is given to the various relationships between rhetoric and philosophy.

**PHIL 425** Fr. McKinney
**Postmodern Philosophy** 3 credits
An examination of the transition from modernist culture and thought to postmodernist culture and thought. Derrida's method of deconstruction will serve as the paradigm example of postmodernism. Recommended for those interested especially in literature and fine arts.

**PHIL 430** Dr. Meagher
**(P)Philosophy of the Social and Behavioral Sciences** 3 credits
The goal of the course is to encourage students to think philosophically about issues raised in social scientific studies, especially regarding the following: 1) The problem of cross-cultural understanding and interpretation, 2) The difficulties of research-design and methodology, and 3) The relationship between social science, ethics, and policy making. Readings will be drawn from social scientific texts, "classic" debates in the philosophy of social science, and recent work in feminist epistemology and philosophy of the social sciences. Students interested in philosophy and/or the social sciences are encouraged to participate.

**PHIL 431** Dr. Fairbanks
**(P)Philosophy of Science** 3 credits
An introduction to the history and philosophy of science. Selections from Darwin's *The Origins of Species* (1859) and *The Descent of Man* (1871) and Popper, Feyerabend, Hanson, Stace, Quine, Frank, Rescher, Hempel, and Baier.

**PHIL 434** Dr. Baillie
**(P)Issues in Philosophy and Theology** 3 credits
This course will investigate certain modern and contemporary problems in the relationship between philosophy and theology. In particular, it will examine the ways in which philosophical discussions (both specific arguments and general positions) influence theological discussions, as evidence of the suggestion that philosophy "gives voice" to theology.

**ED/P 306** Dr. Klonoski
**(P)Philosophy of Education** 3 credits
(Formerly ED/P 106) An examination of representative modern systemic philosophies of education with a critical analysis of the answers that each system of philosophy provides to the important questions concerning the nature of knowledge, value, man and society.

# PHYSICS

*DR. ROBERT SPALLETTA, Chairperson*

The Department of Physics and Electrical Engineering offers majors in Physics and Biophysics, as well as the Electrical Engineering, Computer Engineering and Electronics-Business majors described earlier. The objectives of the department are to provide skills, understanding, and the methodology required to initiate active participation in the development of new knowledge about the material universe. The approach of the physicist, based as it is on the analysis of mathematical models dealing with matter and energy and their interactions, supplies a unique and important insight to the solution of problems in many disciplines.

A 1988 study by the Office of Institutional Research at Franklin and Marshall College shows that over the last 66 years, The University of Scranton ranked 33rd out of 977 four-year, private, primarily undergraduate institutions as the baccalaureate origin of physics doctorates. In addition, the Biophysics concentration in recent years has regularly produced students admitted to medical school.

**PHYSICS**

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **SPRING** |
| MAJOR (GE NSCI) | PHYS 140-141 | Elements of Physics I-II | 4 | 4 |
| COGNATE (GE QUAN) | MATH 103[1]-114 or | Pre-Calculus Math-Analysis I or | 4 | 4 |
| | MATH 114-221 | Analysis I-II | | |
| COGNATE | CMPS 134 | Computer Science I | | 3 |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | 3 | |
| GE PHIL | PHIL 120 | Introduction to Philosophy | | 3 |
| GE FSEM-PHED | INTD 100-PHED | Freshman Seminar-Physical Education | 1 | 1 |
| | | | **15** | **18** |
| | | **SECOND YEAR** | | |
| MAJOR | PHYS 270-352 | Modern Physics- | 4 | 3 |
| | | Statistical & Engineering Thermodynamics | | |
| COGNATE | ENGR 253-254 | Intro. to CAD-3-D CAD | 1 | 1 |
| COGNATE | MATH 221-222 or | Analysis II-III or | 4 | 4 |
| | MATH 222-341 | Analysis III-Differential Equations | | |
| GE S/BH | S/BH ELECT | Social-Behavioral Electives | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE T/RS-PHIL | T/RS 121-PHIL 210 | Theology I-Ethics | 3 | 3 |
| | | | **18** | **17** |
| | | **THIRD YEAR** | | |
| MAJOR | PHYS 447-448 | Electromagnetics I-II | 3 | 4 |
| MAJOR | PHYS 371-372 | Mechanics-Atomic | 3 | 3 |
| | | & Laser Phys. | | |
| MAJOR | PHYS 350 | Applied & Engineering Math | | 3 |
| COGNATE/MAJOR | MATH 341/ELECT | Differential Equations or Elective | 3-4 | |
| GE T/RS | T/RS 122 | Theology II | 3 | |
| GE PHIL or T/RS | T/RS or PHIL | Elective | | 3 |
| GE HUMN | HUMN ELECT | Electives | 3 | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **16-17** | **17** |
| | | **FOURTH YEAR** | | |
| MAJOR | PHYS/EE | Electives | 3 | 3 |
| MAJOR | PHYS 493 | Physics Research | 3 | 3 |
| MAJOR | PHYS ELECT | Elective | 3 | 3 |
| COGNATE | ELECT | Elective | 3 | |
| GE ELECT | ELECT | Elective | 3 | 3 |
| GE ELECT | ELECT | Elective | 3 | 3 |
| | | | **18** | **15** |

**Total: 134-135 CREDITS**

[1] Physics majors starting with MATH 103 due to placement test results take one fewer Physics elective.

# BIOPHYSICS

The Biophysics major is designed to prepare a student to apply the physical and mathematical sciences to problems arising in the life sciences and medicine. By choosing proper electives, the student can prepare to enter graduate study of biophysics, biology, biochemistry, medicine or dentistry.

| | Dept. and No. | Descriptive Title of Course | Credits FALL | SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| MAJOR (GE NSCI) | PHYS 140-141 | Elements of Physics | 4 | 4 |
| MAJOR | BIOL 141-142 | General Biology | 4½ | 4½ |
| COGNATE (GE QUAN) | MATH 103-114 or MATH 114-221 | Pre-Calculus Math/Analysis or Analysis I-II | 4 | 4 |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | | 3 |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| | | | 16½ | 18½ |
| | | **SECOND YEAR** | | |
| MAJOR | PHYS 270-352 | Modern-Statistical Physics | 4 | 3 |
| MAJOR | CHEM 112-113 | General Analytical Chemistry I-II | 4½ | 4½ |
| COGNATE | EE 241 | Circuit Analysis | | 4 |
| COGNATE | CMPS 134 | Computer Science I | 3 | |
| COGNATE | MATH 221-222 or MATH 222-341 | Analysis II-III or Analysis III-Diff. Equations | 4 | 4 |
| GE PHIL | PHIL 120 | Introduction to Philosophy | 3 | |
| GE T/RS | T/RS 121 | Theology I | | 3 |
| | | | 18½ | 18½ |
| | | **THIRD YEAR** | | |
| MAJOR | ELECT | PHYS, BIOL, CHEM | 3 | 3 |
| MAJOR | CHEM 232-233 | Organic Chemistry I-II | 4½ | 4½ |
| GE T/RS | T/RS 122 | Theology II | 3 | |
| GE PHIL | PHIL 210 | Ethics | 3 | |
| GE PHIL or T/RS | PHIL or T/RS | Elective | | 3 |
| GE S/BH | S/BH ELECT | Social-Behavioral Elective | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | 17½ | 17½ |
| | | **FOURTH YEAR** | | |
| MAJOR | ELECT | PHYS, BIOL, CHEM | 6 | 6 |
| GE HUMN | HUMN ELECT | Humanities Electives | 6 | 3 |
| GE ELECT | ELECT | Electives | 3 | 6 |
| | | | 15 | 15 |
| | | | Total: 137 CREDITS | |

**MINOR.** The minor in Physics includes PHYS 140, PHYS 141, PHYS 270 (all with labs), PHYS 352, ENGR 252, and at least one of PHYS 473, PHYS 372 and/or PHYS 371. Minimum credits required for minor: 21.

**Phys 100-114 are courses designed for non-science majors. They require no background in science or math.**

**PHYS 100** Prof. Kalafut
**(E)History of Science and Technology** 3 credits

The evolution of scientific inquiry from the pre-Socratics to the present. Focus on the key concepts and fundamental laws of nature which enable humans to understand and control the forces of nature and develop modern technological societies and on the theme that science arises from traditions that are spiritual as well as technical. The spiritual element will be explored from the perspective of the life and tradition of the Catholic Church and the founding of universities in the Middle Ages.

**PHYS 101** Dr. Varonides
**(E)The Solar System** 3 credits

The study of the solar system, its origin, its evolution, its fate. Study of the planets, asteroids, meteors and comets. Theories about the cosmos from antiquity to the modern age.

**PHYS 102** Dr. Connolly, Staff
**(E)Earth Science** 3 credits
Selected topics from geology and meteorology, weather forecasting, ground and surface water, mountain building, volcanoes, earthquakes, plate tectonics, and oceanography.

**PHYS 103** Dr. Fahey
**(E)Seeing the Light** 3 credits
The physics of light and vision. Includes topics such as biophysics of the human eye, the visual system, color vision, binocular vision, and the wave nature of light.

**PHYS 104** Dr. Zakzewski
**(E)Introduction to Consumer Technology** 3 credits
Every day we listen to the radio or compact-disk recordings, watch TV, use photocopiers and fax machines without really knowing how they work. Designed to provide the scientific background to understand the operation of common communication systems and electronic equipment.

**PHYS 105** Dr. Varonides
**(E)Man and the Evolutionary Universe** 3 credits
The study of the universe from the ancient times to the present. The ideas and approaches of various peoples are to be discussed, from the era of the powerful myths to the scientific approach of the Greeks, up to modern times, focusing on man and the evolving Universe, in a historical and modern perspective. The role and the involvement of the Church in scientific thinking will be stressed as well.

**PHYS 106** Prof. Kalafut
**(E)Energy and the Environment** 3 credits
Focus on various aspects of man's use of energy and changes in the environment that accompany that use. Sources of energy; the nature of the present energy and environmental crises and possible solutions; energy requirements of the future; conservation; and alternate energy sources.

**PHYS 107** Dr. Spalletta
**(E)"Hands-On" Physics** 3 credits
An introduction to the scientific method with an emphasis on the physical reality around us. Students will participate in a series of experiments and discussions illustrating various physical phenomena in order to acquire the scientific background to participate in the assessment of important social, political, and scientific issues such as the environment, energy policy, the application of medical technology and space exploration.

**PHYS 108** Dr. Spalletta
**(E)New York Times Physics** 3 credits
Every day we are bombarded with information regarding the impact of technology on our lives. Using *The New York Times*, students will explore the scientific and technological concepts of our modern world. Topics will vary weekly.

**PHYS 109** Dr. Varonides
**(E)The Conscious Universe** 3 credits
A course that discusses and concentrates on matters like *Waves, Quanta and Quantum Theory*. Science will be viewed as a rational enterprise committed to obtaining knowledge about the actual character of physical reality and the character of the physical law.

**PHYS 110** Dr. Connolly
**Meteorology** 3 credits
Focus on the basic physical and chemical phenomena involved in the determination of climate and weather, enabling the student to comprehend weather events and patterns and weather forecasting. Topics include: atmosphere composition and structure, moisture and precipitation, cloud formation, pressure and wind, cyclones, circulation of atmosphere, air masses and fronts, and forecasting.

**PHYS 113** Dr. Connolly
**The Science of Photography** 3 credits
This course covers the basic science, technology, and history of photography. Topics covered include the nature of light, laws of optics, cameras, development of black and white and color images, and the use of digital electronics. This course may not be used for major elective credit in Physics, Biophysics or Electrical Engineering.

**PHYS 114** Dr. Varonides
**Solar Electricity** 3 credits
This course concentrates on how to obtain energy from the Sun. It explains the history, physics and engineering of this renewable energy source, with special attention to environmental impact on Photovoltaic (PV) technology. Topics also include: environmental protection, economic growth, job creation, diversity of supply, rapid deployment, technology transfer and innovation with a free, abundant and inexhaustible fuel source. This course may not be used for major elective credit in Physics, Biophysics or Electrical Engineering.

**PHYS 120-121** Staff
**(E)General Physics** 8 credits
(Prerequisites: MATH 103-114) General college course for pre-medical, pre-dental, biology, biochemistry and physical therapy majors. Mechanics, heat, electricity and magnetism, sound and light. 3-hour lecture and 2-hour laboratory.

**PHYS 140-141** Staff
**(E)Elements of Physics** 8 credits
(Co-requisite: MATH 114-221) Calculus-based introduction to the elements of physics. Topics covered: mechanics, heat, sound, light and electricity and magnetism. Required of Physics, Electrical Engineering, Mathematics, Computer Science and Chemistry majors. 3-hour lecture and 2-hour laboratory.

**PHYS 201** Dr. Varonides
**(E)Stellar Evolution** 3 credits
An introduction to astrophysics. A course for non-science students that concentrates on the study of the sun, stars and the universe. The evolution of the stars. Their birth, their life-times, their deaths. The remnants of the stars, and exotic entities such as neutron stars, quasars, black holes. Galaxies and galaxy formations. The expanding universe. Red shifts and cosmological principles. Grand unified theories.

**PHYS 270** Prof. Kalafut
**Elements of Modern Physics** 4 credits
(Prerequisites: PHYS 141 and MATH 114) Introductory modern Physics course for Physics and Engineering majors; also recommended for other science majors. Review of classical physics; special theory of relativity; atomic theory of hydrogen from Bohr to Schroedinger; multielectron atoms and the periodic table; introduction to nuclear physics. 3-hour lecture and 2-hour laboratory.

**PHYS 350** Dr. Fahey
**Applied and Engineering Mathematics** 3 credits
(Prerequisite: MATH 222, PHYS 141) First -and second-order differential equations with constant coefficients; Fourier series and Fourier transforms and Laplace transforms; partial differential equations and boundary value problems; special functions, e.g. Bessel functions and Legendre polynomials; numerical analysis and use of MAPLE software. (Also listed as ENGR 350.) 3-hour lecture.

**PHYS 351** Staff
**Mathematical Physics II** 3 credits
Functions of a complex variable. Infinite series in the complex plane. Theory of residues. Conformal mapping. Fourier and Laplace transforms. Advanced partial differential equations. Boundary value problems in Physics. Green's functions.

**PHYS 352** Dr. Varonides
**Statistical and Engineering Thermodynamics** 3 credits
(Prerequisite: PHYS 270) Derivation of Thermodynamics from probability theory and atomic physics; Laws of Thermodynamics; Maxwell relations; chemical potential and phase changes; refrigerators and heat pumps; theory of gasses and theory of solids. Special topics dependent upon interests of majors represented. (Also listed as ENGR 352.) 3-hour lecture.

**PHYS 371** Staff
**Advanced Mechanics** 3 credits
(Prerequisite: MATH 341) Comprehensive course in Newtonian dynamics,variational principles, Lagrange's and Hamilton's equations; theory of small oscillations and specialized non-linear differential equations in mechanical systems.

**PHYS 372** Prof. Kalafut
**Atomic and** 3 credits
**LASER Physics**
(Prerequisite: PHYS 270, MATH 222) Intensive and quantitative treatment of modern atomic physics using the principles and techniques of quantum mechanics. The study of energy levels, pumping, feedback and transition rates in lasers. Required of physics majors and highly recommended elective for electrical engineers. Three hours lecture with optional laboratory.

**PHYS 447** Dr. Varonides
**Electromagnetics I** 3 credits
(Prerequisites: PHYS 270, PHYS 350) Analytic treatment of electrical and magnetic theory; vector calculus of electrostatic fields; dielectric materials; vector calculus of magnetic fields. (Also listed as EE 447.) 3-hour lecture.

**PHYS 448** Dr. Zakzewski
**Electromagnetics II** 3 credits
(Co-requisite: PHYS 447) Magnetic materials, electromagnetic induction, displacement currents, Maxwell's equations; radiation and waves; applications include Transmission lines, wave guides and antennas. (Also listed as EE 448.) 3-hour lecture.

**PHYS 448L** Dr. Zakzewski
**Electromagnetics** 1 credit
**Design Laboratory**
(Co-requisite: PHYS 448) Laboratory designed to emphasis and reinforce the experimental basis of electromagnetism. Multi-week projects require the student to perform experiments that measure fundamental electrical constants, the electrical and magnetic properties of matter, and the properties of electromagnetic waves. (Also listed as EE 448 L.) 2 hour laboratory.

**PHYS 460** Dr. Fahey
**Non-linear Systems** 3 credits
**and Chaos**
This course develops the equations that describe several important non-linear systems in mechanics and in electronics and then develops the solutions. Concepts such as limit cycles, chaotic attractors, hysteresis, stability and phase space will be defined and used to understand complex systems. Classically important oscillators such as the Duffing oscillator, the van der Pol oscillator and the Lorenz equations will be solved at several different levels of approximation with several ODE solvers. Chaos, bifurcations, the routes to chaos, chaotic maps and the correspondence between maps and Poincare sections of physical systems will be studied.

**PHYS 473** Dr. Connolly
**Optics** 3 credits
(Prerequisites: PHYS 270, MATH 341 or PHYS 350) An introduction to the principles of geometrical, physical and quantum optics. Topics to be covered include ray and wave optics, superposition, diffraction, interference, polarization, Fourier methods, and coherence theory. Practical devices such as photodetectors and light sources will also be discussed. 3-hour lecture.

**PHYS 474** Dr. Fahey
**Acoustics** 3 credits
(Prerequisite: PHYS 350) This course covers the fundamentals of vibration as applied to one-, two- and three-dimensional systems with varied boundary conditions. Transmission, absorption, attenuation, and radiation are covered. Resonators and wave guides and filters are studied along with the fundamentals of transducers. Acoustical issues in hearing are covered, time permitting.

**PHYS 493-494** Dr. Spalletta and Staff
**Undergraduate Physics** 6 credits
**Research I -II**
(Prerequisite: Permission of the instructor) Students choose a research project sponsored by a member of the department and approved by the instructor and chairperson. Students gain experience with research literature, techniques, and equipment. Weekly seminars are given on quantum mechanics, mathematics tools, and topics related to ongoing research projects. A written report is required.

# POLITICAL SCIENCE

*DR. LEONARD W. CHAMPNEY, Chairperson*

The Bachelor of Science program in Political Science imparts to students an understanding of: 1. The scope and purpose of government in civil society; 2. The origins, goals, and limitations of democratic government; 3. The structure and functions of the institutions of American government; 4. The similarities and differences in the structures and functions of the governments of other countries; and 5. The nature of the relationships among these governments in the international community.

The Political Science Department offers courses in the major subfields of political science: political institutions, political theory, international relations, comparative politics, public policy, and quantitative methods. In addition to the major in Political Science, the department offers a track in Public Administration and Public Affairs (PAPA) and a minor in Political Science.

Students in the major must take PS 130, PS 131, PS 240, either PS 313 or PS 314, at least one comparative politics course (PS 213, 217, 218, 221, 222, 295, 328, 331, 332, or 338) and at least one course in international relations (PS 212, 318, 330). The remaining 21 political science credits required for the major are selected by the student.

**PUBLIC ADMINISTRATION AND PUBLIC AFFAIRS TRACK.**

Political Science majors may concentrate in Public Administration and Public Affairs (PAPA). This track is designed for students who may seek a career in government service at the federal, state, or local level. It develops analytic and quantitative skills, while providing substantive knowledge of a range of public policy problems, and the management systems designed to implement policy decisions.

Students in this track complete the courses required for the Political Science major as well as PS 135 (State and Local Government), PS 231 (The Public Policy Process), PS 232 (Public Bureaucracies), and PS 480 (Public Administration Internship). For their remaining political science electives, students choose 3 courses from the following: PS 216, PS 227, PS 230, PS 319, PS 322, PS 325, PS 327, PS 329.

Students in this track would complete their cognate in one of two ways. For option one students complete HIST 110-111, HIST 120-121, ECO 153, ECO 154, ACC 253, ACC 254. Option two entails completing a minor, concentration, or another special program in consultation with Dr. Champney or Dr. Harris, the PAPA track advisors.

The department also recommends that students in this concentration take INTD 224 (Q, W) Science, Decision-Making, and Uncertainty.

**POLITICAL SCIENCE MINOR**

To minor in Political Science a student must take a minimum of 18 credits in Political Science. PS 130 (American National Government I) and PS 131 (American National Government II) are required for the minor. The remaining 12 political science credits needed for the minor are selected by the student from the political science courses offered.

# POLITICAL SCIENCE

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **SPRING** |
| MAJOR | PS 130-131 | American National Government | 3 | 3 |
| COGNATE | HIST 110-111 | U.S. History | 3 | 3 |
| COGNATE | ELECT | Elective | | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | 3 | |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE T/RS-PHIL | T/RS 121-PHIL 120 | Theology I-Intro. to Philosophy | 3 | 3 |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **16** | **16** |
| | | **SECOND YEAR** | | |
| MAJOR | PS[3] | Comparative/Internat'l. Politics | 3 | 3 |
| COGNATE | HIST 120-121 | Europe: 1500 to Present | 3 | 3 |
| COGNATE | ELECT[1] | Elective | 3 | |
| GE QUAN | QUAN ELECT | Elective | | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE PHIL-T/RS | PHIL 210-T/RS 122 | Ethics-Theology II | 3 | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **16** | **16** |
| | | **THIRD YEAR** | | |
| MAJOR | PS 240-ELECT[4] | Pol. Science Stats-Elective | 3 | 3 |
| MAJOR | PS 313 or 314-ELECT | Western Pol. Thought-Elective | 3 | 3 |
| MAJOR | PS ELECT | Electives | | 3 |
| GE NSCI | NSCI ELECT | Natural Science Elective | 3 | 3 |
| GE ELECT | ELECT [2] | Free Electives | 6 | 6 |
| GE PHIL-T/RS | PHIL or T/RS ELECT | Elective | 3 | |
| | | | **18** | **18** |
| | | **FOURTH YEAR** | | |
| MAJOR | PS ELECT | Electives | 6 | 6 |
| COGNATE | ELECT | Electives | 3 | 3 |
| GE HUMN | HUMN ELECT [2] | Humanities Elective | 3 | 3 |
| GE ELECT | ELECT[2] | Free Electives | 3 | 3 |
| | | | **15** | **15** |
| | | | **Total: 130 CREDITS** | |

[1]ECO 210 and GEOG 134 are recommended as cognate electives.

[2] The department also recommends a modern foreign language in junior year with subsequent language courses to follow in senior year as part of GE humanities. The department advisor should be consulted.

[3]In addition to the American National Govt. sequence and the courses in statistics and political philosophy, the department requires that majors elect a minimum of one course in comparative politics (from among PS 213, 217, 218, 221, 222, 295, 328, 331, 332, 338) and a minimum of one course in international relations (from among PS 212, 318, 330).

[4]Political Science majors are required to take PS 240 (Statistics) and one semester of political philosophy (either 313 or 314). The alternative semester of the 313-314 sequence is strongly recommended as an elective.

**PS 130-131** Staff
**(S)American National Government** 6 credits
In PS 130, the principles and processes of democratic government in America, The Constitution, and federalism are discussed. PS 131 studies the structure and operations of the branches of government.

**PS 135** Staff
**(S)State and Local Government** 3 credits
The structures, scope, processes, and politics of state and local governments are analyzed. Also considered: the constitutional position of state and local governments; the changing relationships among federal, state and local governments; and policy areas of interest to students in the class (educational policy, criminal-justice policy, etc.)

**PS 212** Dr. VanDyke
**International Relations** 3 credits
(Prerequisites: PS 130-131) This course examines the prominent tenets of IR as an academic discipline. Secondly, students are provided with basic knowledge and tools for analyzing the international system as it unfolds today. A constant theme is bridging the gap between theory and practice of international relations.

**PS 213** Dr. Parente
**Modern Africa** 3 credits
(Formerly H/PS 213)An introduction to the politics of major African states with emphasis on ethnic, racial, and religious tensions as well as the geopolitics of the region.

**PS 216** Dr. Harris
**(D)Women's Rights and Status** 3 credits
Public policies (formal and informal) and their implementation determine the rights of citizens. This course examines public policies that impact the legal, political, economic, and social status of women in the U.S.A. An historical exploration of women's rights will be the foundation for the examination of women's rights and status today. The future prospects of women's rights and status will also be discussed. Where time and resources are available, comparisons with the rights of women in other nations and discussion of the impact of American policies on women in other nations will also be undertaken.

**PS 217** Dr. Parente
**Comparative Government** 3 credits
Political institutions of Germany, France, Britain, and selected Third World nations are analyzed with focus on elections, parties, interest groups and foreign policies.

**PS 218** Dr. Parente
**East European Politics** 3 credits
This course examines the history and politics of East Europe from Poland to the Balkans and from Germany to the Ukraine during the twentieth century. Special attention is given to ethnic politics before and after the communist period and the economics of the new privatization and its problems.

**PS 221** Dr. Parente
**Politics of Southeast Asia** 3 credits
Domestic ethnic and religious politics of Southeast Asia and international politics affecting the region. The ASEAN nations (Thailand, Indonesia, Malaysia, Philippines, Singapore, and Brunei) and Burma, the region's only socialist country, as well as the three communist states of Indochina: Vietnam, Laos, and Cambodia are considered; spheres of influence and capitalism versus state socialism as a lever of economic development are also discussed.

**PS 222** Dr. Parente
**Politics in Russia** 3 credits
This course considers Russian politics and colonialism from the Revolution to contemporary economic efforts to move toward capitalism. The politics of the remnants of the Soviet empire are examined and Stalin and the Bolshevik experiment are also examined.

**PS 227** Dr. Harris
**(D)Women, Authority and Power** 3 credits
The majority of U.S. citizens are women. Women have the same political rights as men. Yet, in our representative democracy, women are a minority of elected government officials, appointed government officials, and top bureaucrats. While American women have always been involved in pressure politics historically, their concerns have not been found on the agendas of governments. This course studies the historical and current paradox of women and U.S. public-policy decision making. It examines the role of women in pressure politics, their integration into positions of political authority, and the future prospects for the political power and authority of women.

**PS 230** Dr. Champney
**(S)Environmental Policy** 3 credits
Introduction to the study of environmental policy in the United States: air pollution; water pollution; land management and conservation; toxic waste and solid waste disposal; and the regulation of nuclear power. Emphasis on the role of legislative, executive, and judicial institutions in shaping the content of policy, as well as a discussion of the impact of federalism. Brief introduction to international environmental cooperation and conflict.

**PS 231** Dr. Champney
**The Public Policy Process** 3 credits
(Formerly PS 111; recommended for background: PS 130-131) Description and analysis of the public policy process in the United States with emphasis on the technical and political problems of policy formulation and implementation. Discussion of the impact of legislative, executive and judicial institutions and processes on the content of public policy.

**PS 232** Dr. Harris
**Public Bureaucracies** 3 credits
(Formerly PS 110; recommended for background: PS 130-131) A study of the structures, scope and processes of American public bureaucracies. The growth of the executive branches of governments, the role of public bureaucracies in our democratic government, and the experiences of American public bureaucrats are analyzed.

**PS 240** Dr. Champney
**(Q,W)Political Science Statistics** 3 credits
Introduction to the quantitative and statistical research methods employed by social/behavioral scientists in general and political scientists in particular: contingency table analysis, the chi squared statistic, simple correlation, partial correlation, and multiple regression. Special emphasis on survey research and public opinion polling: probability sampling, questionnaire construction, and survey administration.

**PS 280** Dr. Homer
**Pre-Law Internship** 3 credits

**PS 310** Staff
**Introduction to American Law** 3 credits
(Formerly PS 311)An inquiry into the major theories of jurisprudence; development of American legal theory and practice; structure, functioning, and contemporary problems of the federal and state court systems.

**PS 311-312** Dr. Kocis
**Constitutional Law** 6 credits
(Formerly H/PS 317-318; PS 311 is a prerequisite for PS 312) An examination, by means of case law, of the tensions between the demands of liberty and the demands of democracy within the American Constitution. Topics include federalism, the separation and division of powers, social issues tied to industrialization and urbanization, commercial and property rights, and the rights of the poor and the oppressed as they arise in our legal framework.

**PS 313-314** Dr. Kocis
**Western Political Thought** 6 credits
An examination of philosophical questions about politics (including the meaning and purpose of human life; the nature of law, morals, justice, and authority; and the role of ideas in political and social life) in classic Western texts from Plato to Marx.

**PS 315** Dr. Kocis
**Modern Political Thought** 3 credits
A study, based on primary materials, of the current state of the controversies in contemporary political thinking. A wide range of perspectives, from far left to far right, will be analyzed and critically examined. Minimally, the works of John Rawls, Robert Nozick, C.B. Macpherson, Isaiah Berlin, and Leo Strauss will be included.

**PS 316** Dr. Kocis
**Jurisprudence** 3 credits
An examination of the differences between "the law" and "the laws"; the nature of legal systems; the nature and grounds of political, moral and legal obligations, and the controversy between the traditions of Natural Law and Positive Law.

**PS 318** Dr. VanDyke
**U.S. Foreign Policy:** 3 credits
**Cold War and Aftermath**
(Prerequisite: HIST 111) Examines and analyzes critically the content of American foreign policy in the Cold War and post-Cold War eras. Special emphasis on themes, goals and means of American foreign policy, particularly national security.

**PS 319** Dr. VanDyke
**U.S. Foreign Policy Process** 3 credits
(Prerequisites: PS 131 and HIST 111) Examines the actual formulation and implementation of American foreign policy within the decision-making process. Analyzes what the process is, who the decision makers are, and internal and external variables of policy-making in the U.S. Involves at least two in-depth American-foreign-policy case studies.

**PS 320** Dr. Kocis
**Twentieth Century Ideologies** 3 credits
A study, based on primary texts, of the philosophical foundations of the three major political ideologies identified with the twentieth century: communism, fascism and democracy. In addition, feminism, racism, environmentalism and other more current ideologies will be analyzed and critically examined.

**PS 321** Dr. Kocis
**(D)Chinese Political Thought** 3 credits
An intense study, based on translations of primary texts, of the great philosophical traditions of China and their political implications. Beginning with the *I Ching (Book of Changes)*, the course will cover the great traditions of Taoism and Confucianism, examine their evolutions and competitors through three millenia, and end with the works of Mao Tsetung.

**PS 322** Dr. Harris
**Public Personnel** 3 credits
(Prerequisites: At least two of PS 130, 131, 232 or permission of instructor) An examination of public-personnel administration and management. Theories of organization, personnel choices, personnel management, civil-service history, and current issues in personnel administration and management are considered.

**PS 325** Dr. Harris
**Politics of the Budgetary Process** 3 credits
(Prerequisites: At least 2 of PS 130, 131, 232 or permission of instructor) Public budgeting in theory and in practice is discussed. Historical reforms and the inevitable politics of the process are considered. Use of budget simulations allow for practical experience.

**PS 326** Dr. Kocis
**Theories of Political Economy** 3 credits
An examination of the works of the great thinkers in the tradition of the political economy, and an extensive study of the historical evolution of theories of value, the creation of value and the increase of productive abilities.

**PS 327** Dr. Champney
**The U.S. Congress** 3 credits
An examination of the historical development of the legislative branch of government; its prominence over the executive branch in the nineteenth century and decline in the twentieth century. Emphasis on theories of representation and on the policy-formulation process.

**PS 328** Dr. Parente
**Modern China** 3 credits
(Formerly H/PS 326) Study of modern Chinese politics in the nineteenth and twentieth centuries. Problems of modernization, Westernization, and communism in the People's Republic of China.

**PS 329** Dr. VanDyke
**The American Presidency** 3 credits
(Prerequisite: PS 131) This course will focus on the American Presidency — historical development, powers of the office, elections, models of the presidency and, to a lesser extent, the relations between the President and congress, and the President and the judiciary.

**PS 330** Dr. Van Dyke
**Western Europe in World Affairs** 3 credits
(Prerequisites: PS 212 or PS 217). This seminar provides an historical, political, and analytical foundation for understanding the profound political and economic changes facing Europeans today. This involves studying the two world wars, the formation of Cold-War alliances and security systems, the European integration movement, the foreign policies of major European states, and organization of post-Cold War Europe.

**PS 331** Dr. Van Dyke
**The European Union** 3 credits
(Enrollment only by permission from the professor.)
Provides an in-depth study of the European Union and its fifteen member states in order to prepare students for an intercollegiate simulation of the EU, which is held in Washington, D.C., each December. Students examine the EU's theoretical and historical foundations, its institutions and policy procedures, and the ongoing challenges for European integration.

**PS 332** Dr. Parente
**Modern Japan** 3 credits
(Formerly H/PS 327) This course examines the history and politics of Japan; the period of the shoguns; the reforms of the modernizing Meiji era at the end of the nineteenth century; the Japanese effort to conquer Asia; the postwar political structure; the question, "Is Japan a democracy?"; and the economic miracle of the present.

**PS 338** Dr. Parente
**Politics of Islam** 3 credits
(Formerly H/PS 338) This course examines political ideology of Islam; the political content of the Koran; the effort to establish theocracies in a number of states from Iran to Egypt to Malaysia and Indonesia; Islam as a political opposition in such countries as the Philippines, Russia, and China; Shiite versus Sunni sects; the politics of Israel and the Islamic states of the Middle East; OPEC; the Palestinian question; political terrorism; Islam as an expansionist ideology.

**PS 384** Staff
**Special Topics in Political Science** 3 credits

Study and analysis of selected topics in the field of Political Science. The particular topic or topics will vary from year to year depending on the instructor and changing student needs.

**IS 390** Staff
**Seminar in International Studies** 3 credits

Required for International Studies majors. Other advanced undergraduates may take this course with permission of the professor. This course can count for either political science credit or history credit.

**PS 480** Dr. Champney
**Public Administration Internship I** 3 credits

Permission of faculty advisor and Dr. Champney required for internship registration.

**PS 481** Dr. Champney
**Public Administration Internship II** 3 credits

Permission of faculty advisor and Dr. Champney required for internship registration.

**(D) SPAN/PS 295** Drs. Kocis, Parsons
**Contemporary Mexican Culture and Language** 3 credits

A six-credit intersession travel course to Guadalajara, Mexico, for three credits in Humanities (foreign language area, intermediate and/or advanced level), three credits in the social sciences (political science), as well as cultural diversity credit. The course is team-taught by University of Scranton faculty from the Departments of Foreign Languages and Political Science with assistance from Mexican faculty at UNIVA.

# PSYCHOLOGY

*DR. JAMES P. BUCHANAN, Chairperson*

Psychology provides a unique educational experience of quality, breadth and flexibility. Our curriculum has been carefully designed to give students a balanced education in the discipline and the widest range of options, from baccalaureate entry-level positions to graduate training in prestigious universities. According to a recent independent study, the number of the University's graduates who have gone on to receive doctorates in psychology has placed us in the top 10% of comparable institutions nationally.

Psychology majors are required to take PSYC 110, PSYC 210, PSYC 330 with lab, PSYC 390 (fall-junior year), and PSYC 490-491 (senior year). Students also take a minimum of five courses from the following list with at least one course in each group: Physiological Processes (230, 231), Learning Processes (234, 235), Social-Developmental Processes (220, 221), and Individual Processes (224, 225). Students are free to choose from any of these or the remaining Psychology courses to fulfill the four additional course requirements in the major. Completion of two optional Psychology laboratory courses constitutes an elective course. Students are encouraged to take PSYC 493-494 (Undergraduate Research) in their junior or senior year.

The Psychology Department encourages students to tailor their programs to their own needs and interests. For example, students interested in marketing, personnel, or industrial-organizational psychology may elect a business minor and recommended courses in Psychology. Interdisciplinary programs, such as the Human Development Concentration, and dual majors are also available with a number of other departments.

Consult your advisor and the Psychology Handbook for recommended courses, both major and cognate, tailored to your interests.

To avoid duplication of course content, Psychology majors may not register for the following courses: HS 111, Introduction to Human Adjustment; HS 242, Counseling Theories; HS 293, research methods in Human Services; and HS 323, Psychiatric Rehabilitation. Students who wish to declare a minor or a second major in Human Services should consult their advisor and the chair of Human Services with regard to the above course restrictions.

**MINOR**. A minor in Psychology consists of PSYC 110, PSYC 210, PSYC 330 lecture, and one course from three of the following four groups: Physiological Processes (230, 231), Learning Processes (234, 235), Social-Development Processes (220, 221), and Individual Processes (224, 225). An equivalent statistics course and/or an equivalent methods course may be substituted for either PSYC 210 (Statistics) and/or PSYC 330 (Research Methods). Any substituted course must then be replaced with a 3-credit Psychology course.

Total: 18 credits in psychology.

# PSYCHOLOGY

| | Dept & No | Descriptive Title of Course | Credits FALL | Credits SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| MAJOR | PSYC 110-ELECT | Fund. of Psyc.-Psyc. Elective | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | 3 | |
| GE QUAN | MATH[1] | Elective[1] | | 3 |
| GE S/BH | SOC 110[2] | Intro. to Sociology[2] | 3 | |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | | 3 |
| GE PHIL | PHIL 120-210 | Introduction Philosophy-Ethics | 3 | 3 |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **16** | **16** |
| | | **SECOND YEAR** | | |
| MAJOR | PSYC 210-330 | Statistics-Research Methods | 3 | 5 |
| MAJOR | MAJOR ELECT | Psychology Electives | 3 | 3 |
| GE ELECT | WRTG 211[2] | Technical & Business Writing[2] | 3 | |
| GE NSCI | NSCI ELECT[3] | Elective[3]-Elective[3] | 3 | 3 |
| GE S/BH | S/BH ELECT | Soc./Beh. Science Elective | | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | 3 | |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **16** | **15** |
| | | **THIRD YEAR** | | |
| MAJOR | PSYC 390 | Academic & Career Dev. in Psychology | 1 | |
| MAJOR | MAJOR ELECT | Psychology Electives | 6 | 9 |
| GE ELECT | ELECT | Elective-Elective | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE T/RS | T/RS 121-122 | Theology I-Theology II | 3 | 3 |
| | | | **16** | **18** |
| | | **FOURTH YEAR** | | |
| MAJOR | MAJOR ELECT | Psychology Elective | 3 | |
| MAJOR | PSYC 490-491 | Hist. & Lit. of Psych. I & II | 2 | 1½ |
| GE T/RS or PHIL | PHIL or T/RS | Elective | 3 | |
| GE ELECT | ELECT | Free Elective-Free Electives | 3 | 9 |
| | | | 9 | 15 |
| | | | **17** | **16½** |
| | | | | **Total: 130½ CREDITS** |

[1] Math 103 or 106 or 109 or 114

[2] The department strongly recommends WRTG 211 ( Technical & Business Writing) in preparation for Research Methods and higher-level Psychology courses, and SOC 110 ( Intro. to Sociology).

[3] BIOL 101 and either BIOL 201(Anatomy and Physiology) or BIOL 202 (The ABC's of Genetics) or BIOL 110-111 or BIOL 141-142. Lab credits for BIOL 110-111 and 141-142 can be placed in GE Elective areas.

[4] No more than 15 credits of Psychology electives may be placed in the free elective area.

**PSYC 105** Dr. Cannon

**(E)Brain and Human Nature** 3 credits

An examination of the human mind, brain and why we are the way we are. Topics include: the mind-body problem, the nature of consciousness, the evolution of behavior, addictions (e.g., love), eating disorders, depression, and aggression. (Credit cannot be earned for this course and PSYC 231; not open to Psychology majors or minors.)

**PSYC 106** Dr. Cannon

**(E)Drugs and Behavior** 3 credits

This course will examine interactions between drugs and behavior. Behavioral topics will include: tolerance, addiction, learning, aggression, sexual behavior, eating, anxiety, depression and schizophrenia. Drug/drug categories will include: alcohol, cannabis, opiates, antidepressants and anti-anxiety. (Credit cannot be received for this course and PSYC 384, Psychopharmacology; not open to Psychology majors or minors.).

**PSYC 110** Staff
**(S)Fundamentals of Psychology** 3 credits
An introduction to the scientific study of behavior through a survey of psychology's principal methods, content areas and applications. Course requirements include participation in psychological research or preparation of a short article review.

**PSYC 210** Drs. Baril, Dunstone, Hogan
**(Q)Statistics in the Behavioral Sciences** 3 credits
An introduction to the basic statistics in the behavioral sciences, including organization and display of data; measures of central tendency; variability; correlation and regression; one- and two-sample t-tests; confidence intervals, one-way and two-way analysis of variance, chi-square; and consideration of effect size, power, and null hypothesis testing including types of errors. Students will be introduced to the computerized statistical analysis package SPSS-PC.

**PSYC 220** Dr. Baril
**(S)Social Psychology** 3 credits
(Prerequisite: PSYC 110) Social determinants of behavior from a psychological perspective. Topics include liking, love, conformity, persuasion, attitude change, and person perception.

**PSYC 221** Drs. Buchanan, Slotterback
**(S)Childhood and Adolescence** 3 credits
(Prerequisite: PSYC 110) Survey of psychological research dealing with the development and behavior of children. The physical, cognitive and social aspects of development, from infancy to adolescence, are considered.

**PSYC 222** Dr. Slotterback
**(S)Adulthood and Aging** 3 credits
(Prerequisite: PSYC 110) Survey of psychological research dealing with the age-graded aspects of behavior in adulthood. Course will consider the physical, cognitive and social aspects of the aging process from late adolescence to death. Topics include occupation selection, marriage, parenthood, middle age, retirement and dying.

**PSYC 224** Dr. Slotterback
**(S)Personality** 3 credits
(Prerequisite: PSYC 110) A survey and critical evaluation of personality and its implications for assessment, psychotherapy, and research.

**PSYC 225** Drs. Alford, Norcross
**(S)Abnormal Psychology** 3 credits
(Prerequisite: PSYC 110) A comprehensive survey of mental and behavioral disorders from biological, psychological, and sociocultural perspectives. The course will consider diagnosis and labeling, overview of specific disorders, and various treatment approaches.

**PSYC 230** Dr. O'Malley
**Sensation and Perception** 3-4 credits
(Prerequisite: PSYC 110) Concerns the study of sensory mechanisms and perceptual phenomena. Optional lab entails supervised individual experimentation. Three credits lecture and optional one credit laboratory. Lab fee; lab offered only in Spring.

**PSYC 231** Dr. Cannon
**(E)Behavioral Neuroscience** 3-4.5 credits
(Prerequisite: PSYC 110 or BIOL 141-142) Introduction to the field of neuroscience, examining the cellular bases of behavior, effects of drugs and behavior. brain/body correlates of motivation and emotion, and neural changes accompanying pathology. Three hours lecture and optional 1.5 credit laboratory. Lab fee; lab offered fall only.

**PSYC 234** Dr. Buchanan
**(S)Cognitive Psychology** 3-4 credits
(Prerequisite: PSYC 110) Considers a number of approaches to the study of human cognitive processes with an emphasis on the information processing model. Topics include pattern recognition, attention, memory, imagery, concepts and categories, and problem solving. Three credits lecture and optional one credit laboratory. Lab fee; fall only.

**PSYC 235** Dr. Dunstone
**Conditioning and Learning** 3-4.5 credits
(Prerequisite: PSYC 110) Concerns the experimental study of both classical and instrumental conditioning. Optional lab involves supervised animal and human experimentation. Three credits lecture and optional 1.5 credit laboratory. Lab fee; spring only.

**PSYC 236** Dr. Baril
**Industrial/Organizational Psychology** 3 credits
(Prerequisite: PSYC 110) The psychological study of people at work. Topics include personnel selection and training, motivation, leadership, the physical work environment, and computer applications. Fall only.

**PSYC 237** Staff
**(D,S)Psychology of Women** 3 credits
(Prerequisite: PSYC 110) Examines the biological, sociological and cultural influences on the psychology of women. Topics include gender socialization, sex roles, and the impact of gender on personality, communication, achievement, and mental health. Fall, every other year.

**Special Topics** in Psychology courses at the 200 level are developed by individual faculty to provide in-depth coverage of a specific area. Prerequisites are PSYC 110 and at least sophomore status. This course and PSYC 384 may be used only once to satisfy major elective requirements.

**PSYC 284** Drs. Norcross & Cannon
**Special Topics:** 3 credits
**Behavior Modification**

**PSYC 284** Dr. O'Malley
**Special Topics:** 3 credits
**Sports Psychology**

**PSYC 284** Staff
**Special Topics:** 3 credits
**Psychology of Language**

**PSYC 330** Drs. Baril, Cannon,
**Research Methods** Hogan, Slotterback
**in the Behavioral Sciences** 5 credits
(Prerequisites: PSYC 110 and a grade of C or higher in PSYC 210) A survey of scientific method and research design in the behavioral sciences. Topics include single subject, survey, correlational and experimental research. Lecture and lab involve computerized data analyses. Lab also includes supervised research and scientific writing. Three credits lecture, two credits laboratory. Lab fee; spring only. The laboratory is writing-intensive.

**PSYC 335** Drs. Hogan, Norcross
**(W)Psychological Testing** 3 credits
(Prerequisites: PSYC 110 and a grade of C or higher in PSYC 210) Provides a thorough grounding in principles of testing and a review of the major types of assessment, including intellectual, personality, and interest.

**PSYC 360** Dr. Norcross
**(W)Clinical Psychology** 3 credits
(Prerequisites: PSYC 110 and a grade of C or higher in PSYC 225) An overview of contemporary clinical psychology focusing on its practices, contributions and directions. Topics include clinical research, psychological assessment, psychotherapy systems, community applications, and emerging specialties, such as health and forensic psychology. Fall only.

**Special Topics** courses at the 300 level are developed by individual Psychology faculty to provide in-depth coverage of a specific area. Prerequisites include PSYC110, at least sophomore status, and other psychology courses determined by the instructor. This course and PSYC 284 may be used only once to satisfy major elective requirements.

**PSYC 384** Dr. Cannon
**Special Topics:** 3 credits
**Psychopharmacology**
(Prerequisite: a grade of C or higher in PSYC 231)

**PSYC 384** Dr. Alford
**Special Topics:** 3 credits
**Cognitive Psychotherapies**
(Prerequisite: a grade of C or higher in PSYC 225)

**PSYC 384 (Area I)** Dr. Hogan
**Special Topics:** 3 credits
**Multivariate Statistics**
(Prerequisite: a grade of C or higher in PSYC 210)

**PSYC 390** Staff
**Academic and Career** 1 credit
**Development in Psychology**
(Prerequisites: junior status; Psychology major) This seminar, designed for Psychology majors in their junior year, will entail studying, discussing, and applying information on academic planning, career development, and graduate school. Course requirements include attendance at several academically-related department events or psychologically-related university presentations. Graded Satisfactory/Unsatisfactory. Offered fall only.

**PSYC 480** Drs. Norcross, Alford
**Field Experience in** 3 credits
**Clinical Settings**
(Prerequisites: a grade of C or higher in PSYC 225, PSYC 335, PSYC 360, and permission of instructor) This course entails supervised field experience in a mental-health or social-service facility in the community. Students are required to spend 8 hours a week at their placement and 1.5 hours a week in a seminar throughout the semester. The professor provides classroom instruction, and the on-site supervisor provides clinical supervision. Limited to Juniors and Seniors; graded Satisfactory/Unsatisfactory.

**PSYC 481** Dr. Baril
**Field Experience in** 3 credits
**Personnel Psychology**
(Prerequisites: a grade of B or higher in PSYC 236 and 335, MGT 361, and permission of the instructor) This course entails supervised field experience in a personnel office. Students are required to spend 10 hours a week at their placement and one hour periodically throughout the semester in a seminar. Limited to Juniors and Seniors; graded Satisfactory/Unsatisfactory. Offered as a reader.

**PSYC 490** Dr. O'Malley
**History and Literature** 2 credits
**of Psychology I**
(Prerequisites: senior status; Psychology major or minor) This lecture- and discussion-course will examine the history of modern psychology from pre-Socratic philosophers to contemporary perspectives. Emphasis will be placed on the influential works of various schools of thought that have shaped the emergence of psychology. Fall only.

**PSYC 491** Staff
**(W)History and Literature** 1.5 credits
**of Psychology II**
(Prerequisite: senior status; a grade of C or higher in PSYC 490) This seminar, designed for students with a major or minor in Psychology, will entail critical reading, analysis, and discussion of selections from the seminal literature in psychology, including selected works of William James, Sigmund Freud, and B.F. Skinner. Individual professors will choose additional readings on the basis of their interests and student preferences. Spring only.

**PSYC 493-494** Staff
**Undergraduate Research** 3-6 credits
(Prerequisites: PSYC 330; a grade of B or higher in PSYC 330 lecture and the Psychology course most relevant to research topics; and permission of professor) Individual study and research on a specific topic under the supervision of a faculty member. Students are expected to spend a minimum of 10 hours a week on research activities throughout the semester. Limited to Juniors and Seniors.

# SOCIOLOGY

*PROF. JOHN PRYLE, Chairperson*

Courses in Sociology are designed to meet the intellectual and career interests of students who are concerned about what is happening in their society and in their daily personal interaction with other people. In addition, the courses are designed to help the student interested in the fields of Social Work, Human Services, Industrial Organization, Urban Planning, etc., to attain a pre-professional orientation to these fields.

Students interested in Urban Planning are advised to include SOC 116, 224, and 231 in their planning; for Social Work, SOC 234, 115, 116, 118, and 224; for Medical Services/Administration, SOC 216, GERO 212, 216, 218, and 230; for Human Resources/Administration, SOC 226, 227, and 228.

The Department of Sociology/Criminal Justice also administers the Criminal Justice major described earlier and the Gerontology major described on the next page.

**SOCIOLOGY**

| | Dept. and No. | Descriptive Title of Course | Credits FALL | SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| MAJOR | SOC 110-112 | Intro. to Sociology-Social Problems | 3 | 3 |
| GE S/BH | PSYC 110 | Fundamentals of Psychology | 3 | |
| GE C/IL | C/IL 102 | Computing and Information Literacy | 3 | |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE QUAN | S/CJ 215 | Statistics for the Social Sciences | | 3 |
| GE PHIL | PHIL 120 | Introduction to Philosophy | 3 | |
| GE T/RS | T/RS 121 | Theology I | | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | | 3 |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **16** | **16** |
| | | **SECOND YEAR** | | |
| MAJOR | SOC 318-224 | Sociological Theory-American Minority Groups | 3 | 3 |
| MAJOR | SOC 211 -SOC ELECT | Methods of Social Research-Sociology Elective | 3 | 3 |
| COGNATE | HS 241 | Case Management and Interviewing | | 3 |
| GE S/BH | GERO 110 | Introduction to Gerontology | 3 | |
| GE PHIL-T/RS | PHIL 210-T/RS 122 | Ethics-Theology II | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | 3 | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **16** | **16** |
| | | **THIRD YEAR** | | |
| MAJOR | SOC ELECT | Sociology Electives | 3 | 3 |
| COGNATE | COGNATE ELECT [1] | Political Science Elective | 3 | |
| COGNATE | COGNATE ELECT [1] | Psychology Elective | | 3 |
| GE ELECT | COGNATE ELECT [1] | Social Science Electives | 3 | 3 |
| GE NSCI | NSCI ELECT | Electives | 3 | 3 |
| GE PHIL or T/RS | PHIL or T/RS | Elective | 3 | |
| GE HUMN | HUMN ELECT | Humanities Elective | | 3 |
| GE ELECT | ELECT | Free Electives | 3 | 3 |
| | | | **18** | **18** |
| | | **FOURTH YEAR** | | |
| MAJOR | SOC ELECT | Sociology Electives | 6 | 3 |
| MAJOR | SOC 480-481 or ELECT[2] | Internships or Electives | 3 | 3 |
| COGNATE | COGNATE ELECT [1] | Social Science Electives | 3 | 6 |
| GE ELECT | ELECT | Free Electives | 3 | 3 |
| | | | **15** | **15** |

**Total: 130 CREDITS**

[1] In the cognate Social Science electives, the department recommends a mix of Human Services, Criminal Justice, Gerontology, and Psychology electives, especially PSYC 224 (Personality).

[2] Department Recommendation - The social-work internship may be taken in either the junior or senior year, or both (not to exceed a maximum of six credits of internship).

**MINOR:** A minor in Sociology will require 18 credits. There are three required courses: SOC 110 (Introduction to Sociology); SOC 112 (Social Problems); and SOC 318 (Sociological Theory). The following elective courses are strongly recommended by the department in the Sociology sequence: SOC 234 (Cultural Anthropology); SOC 231 (Urban Sociology); SOC 224 (American Minority Groups); and SOC 226 (Sociology of Work and Professions).

# GERONTOLOGY

The degree program in Gerontology has the following objectives:

1. To understand the processes of aging;
2. To prepare for careers in agencies and institutions serving the older adult, such as area agencies on aging, family services, long-term care facilities, federal, state, and local governmental agencies, retirement communities, business and industry, etc.;
3. To provide a liberal gerontology education with special emphasis on the development of the whole person; and
4. To provide students with academic preparation for advanced study in gerontology, social work, public administration, social welfare and related fields.

The Scranton area is especially suited to serve as a laboratory setting for gerontology education with its high proportion of older adults and its many agencies and facilities for the same. The department has established an Advisory Board in Gerontology composed of practitioners in the field: health specialists, community leaders, and senior citizens. The Advisory Board will help to ensure that the program curriculum is current.

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **SPRING** |
| MAJOR | SOC 110 | Introduction to Sociology | 3 | |
| MAJOR | GERO 110 | Introduction to Gerontology | | 3 |
| GE S/BH | PSYC 110 | Fundamentals of Psychology | 3 | |
| GE C/IL | C/IL 102 | Computing and Information Literacy | 3 | |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE QUAN | S/CJ 215 | Statistics for the Social Sciences | | 3 |
| GE PHIL | PHIL 120 | Introduction to Philosophy | 3 | |
| GE T/RS | T/RS 121 | Theology I | | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | | 3 |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **16** | **16** |
| | | **SECOND YEAR** | | |
| MAJOR | SOC 211-GERO 218 | Methods of Soc. Research-Health & Aging | 3 | 3 |
| MAJOR | GERO 232-230 | Aging and Death-Social Policy and Aging | 3 | 3 |
| COGNATE | HS 241 | Case Management and Interviewing | 3 | |
| GE S/BH | SOC 224 | American Minority Groups | | 3 |
| GE PHIL | PHIL 210 | Ethics | 3 | |
| GE T/RS | T/RS 122 | Theology II | | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **16** | **16** |
| | | **THIRD YEAR** | | |
| MAJOR | GERO ELECT[1] | Gerontology Electives | 3 | 3 |
| COGNATE | PSYC 222-SOC 228 | Adulthood and Aging-Social Psychology | 3 | 3 |
| COGNATE | HADM 112-SOC SCI | Health Systems-Social Science Elective | 3 | 3 |
| GE NSCI | NSCI ELECTIVES | Electives | 3 | 3 |
| GE PHIL or T/RS | PHIL or T/RS ELECT | Elective | 3 | |
| GE HUMN | HUMN ELECT | Humanities Elective | | 3 |
| GE ELECT | ELECT | Free Electives | 3 | 3 |
| | | | **18** | **18** |
| | | **FOURTH YEAR** | | |
| MAJOR | GERO ELECT | Gerontology Electives | 3 | 6 |
| MAJOR | GERO 480-481/ELECT[1] | Internships/or Electives | 3 | 3 |
| COGNATE | ELECT | Social Science Electives | 6 | 3 |
| GE ELECT | ELECT | Free Electives | 3 | 3 |
| | | | **15** | **15** |
| | | | **Total:** | **130 CREDITS** |

[1] Department recommendation - The Gerontology Internship may be taken in either the junior or senior year, or both (not to exceed a maximum of six credits of internship).

**MINOR:** A minor in Gerontology will require 18 credits - There are three required courses: SOC 110 (Introduction to Sociology); GERO 110 (Introduction to Gerontology); and GERO 230 (Social Policy and Aging). The following elective courses are strongly recommended by the department in the Gerontology sequence: GERO 218 (Health and Aging); GERO 216 (Aging and the Community); GERO 212 (Aging and the Life Cycle); GERO 232 (Aging and Death).

**SOC 110** Staff
**(S)Introduction to Sociology** 3 credits
Fundamental principles in the field of sociology. Stratification, ethnicity, deviance; basic institutions of society; social change and demographic trends.

**SOC 112** Staff
**(S)Social Problems** 3 credits
Application of sociological principles to major issues in contemporary society.

**SOC 115** Prof. Naughton, Prof. Pryle
**Introduction to Social Work** 3 credits
Growth of social work as a professional endeavor. The scope of social work; case-work in the medical, psychiatric, family and child welfare, and guidance fields, community organization, social research, social planning, social group work. Current trends in social work.

**SOC 116** Dr. Jones, Prof. Pryle
**Community Organization** 3 credits
A general introduction to the field and process of community organization, both as a field of social work and as a field of human endeavor. The coordination and financing of welfare activities, methods of appraising community needs and resources, planning and the initiation of welfare services. Services of a voluntary and governmental nature, strategies of power.

**SOC 118** Prof. Baldi, Prof. Pryle
**Child Welfare** 3 credits
Development of child-welfare in the United States. Educational, health, recreational and child labor regulations. Study and treatment of children in their own homes, foster homes and institutions. Child care and protective programs on federal, state and local levels.

**SOC 132** Dr. Rynn
**Introduction to Archaeology** 3 credits
An introduction to the study of archaeology from anthropological and historical perspectives. Areas to be explored include survey and site recognition, excavation planning, record keeping, treatment of artifacts, and above-ground archaeology.

**SOC 210** Dr. Wolfer
**(D, W)Marriage and the Family** 3 credits
An historical, comparative, and analytical study of marriage and family institutions. Problems of courtship, mate selection and marriage adjustment in modern society.

**SOC 211** Dr. Wolfer
**Methods of Social Research** 3 credits
This course is designed to help the student understand the range of research methods used in sociological and gerontological research/investigations and evaluate their strengths and weaknesses. It will also help students to appreciate some basic problems involved in the collection and analysis of data.

**SOC 212** Prof. Pryle
**Religion and Society** 3 credits
A survey of religious systems and their interrelations with society and social institutions, with emphasis on the social consequences and determinants of religious behavior. The theories of Durkheim, Weber, Parsons, Bellah, Berger and Luckman will be examined.

**SOC 213** Dr. Jones
**Collective Behavior and Social Movements** 3 credits
This course will examine collective behavior which includes protest demonstrations, riots, mass or diffuse phenomena such as fads and crazes, social movements, and revolution, with a decided emphasis on social and political movements. This course is recommended for those interested in sociology, political science, history, or other social sciences.

**SOC 214** Staff
**Sociology of Sport** 3 credits
The role of sport in civilized societies; sport as work and recreation; women and minorities in sport; sport in education; sport and the mass media.

**SOC 215** Dr. Jones
**Feminism and Social Change** 3 credits
This course will examine the relationship between feminism and social change. We will explore and study the feminist movements, and how feminist ideologies, strategies, and individuals influenced social movements. We will also explore the outcomes of women's movements in terms of successes and failures, as well as the backlash and mobilization of counter-movements. Specifically, we will examine the impact and consequences of feminism for society, for various organizational and professional roles and for individual women in everyday life.

**SOC 216** Prof. Naughton, Prof. Pryle
**Medical Sociology** 3 credits
The social dimensions of health and illness; role of physician, nurse and patient; social organization of health services; the content of medical practice; culture and health disorders; mental health and mental illness.

**SOC 224** Prof. Pryle, Dr. Rynn
**(S, D)American Minority Groups** 3 credits
Patterns of adjustment between ethnic and racial groups, with special attention given to the American scene. Prejudice and discrimination as opposed to the democratic ideology.

**SOC 226** Prof. Naughton
**Sociology of Work and Professions** 3 credits
The nature and role of contemporary occupations and professions in the life cycle are discussed; occupational choice, career patterns and occupational mobility are noted. The student is made aware of the relationship among education, work and aspirations. The career path from entry-level job to retirement is examined.

**SOC 227** Dr. Rynn
**Business and Society** 3 credits
Modern industrialism as social behavior. Social conditions in the rise of industrialism and their effect on the worker; collective bargaining and industrial conflict, the industrial community; social classes and the industrial order. This course will also show how the business sector impacts on society and on the globalization of the economy.

**SOC 228** Dr. Rynn
**Social Psychology** 3 credits
Study of individual behavior as affected by cultural and social stimuli. Emphasis on the analysis of human conduct in social settings.

**SOC 229** Staff
**Crisis in Population** 3 credits
A study of the basic variables of population, birth, death and migration, socioeconomic and cultural variables affecting population-growth, projections and forecasts. The chief natural and social demographic theories. Population policies and practices in selected world areas.

**SOC 231** Prof. Pryle
**Urban Sociology** 3 credits
Urban ecology and culture as the dominant form of community life in contemporary society; their characteristics, peculiarities, and problems.

**SOC 232** Atty. Cimini
**(D)Great American Cities** 3 credits
A sociological triptych through 20 selected major U.S. cities will encounter a variety of cultures and examine that matrix of ideas, creeds, religions, races, ethnicities, attitudes, habits, artifacts and institutions - social, educational, artistic, political, and economic - which condition the way the people in each city lives.

**SOC 234** Dr. Rynn
**(S, D)Cultural Athropology** 3 credits
Cultural and social organization among primitive or preliterate societies; marriage, property, religion, magic and tribal control. Significance of the study of primitive cultures for understanding of urban industrial civilizations.

**SOC 235** Dr. Rynn
**Peoples of East Asia** 3 credits
The anthropology of the East Asian culture area, focusing particularly on China and Japan. Topics include basic social institutions, world views, culture and personality, and the problem of modernization.

**SOC 284** Staff
**Special Topics in Sociology**
(Prerequisite: consent of the chairperson and the instructor) Courses designed to meet specific needs of individual students or courses offered on a trial basis to determine the value of placing them into the regular curriculum.

**SOC 318** Drs. Jones and Rynn, Prof. Pryle
**Sociological Theory** 3 credits
An examination of the major theoretical developments in sociological theory from the classical period of Marx, Weber, and Durkheim to contemporary schools such as structural-functionalism, conflict theory, exchange theory, and symbolic interaction.

**SOC 382-383** Staff
**Independent Study** 3 credits
**in Sociology**
Designed for advanced students who are capable of independent study. A program of planned research under the guidance of a faculty member. Registration upon approval of chairperson and instructor.

**SOC 480-481** Prof. Pryle
**Internship in Social Work** 3 credits
(Prerequisite: permission of instructor) Supervised experiential learning designed to broaden the educational experience of students through practical experience and work assignments with governmental and/or community agencies in the field of social work. Supervision by a faculty member and agency supervisor. Limited to Juniors and Seniors.

*Approved courses from other curricula:*
Sociology majors may be advised to choose several courses taught in the Criminal Justice sequence; courses so approved include:

S/CJ 210 Law and Society
S/CJ 213 Criminology
S/CJ 214 Juvenile Delinquency
S/CJ 218 The American Court System
S/CJ 220 Penology: Corrections
S/CJ 221 Probation and Parole
S/CJ 224 Sociology of Deviance
S/CJ 225 White Collar Crime
S/CJ 227 Organized Crime Patterns
S/CJ 317 Trial, Jury and Counsel
S/CJ 324 Victimology

# GERONTOLOGY COURSES

**GERO 110** Staff
**(S)Introduction to Gerontology** 3 credits
A multi-disciplinary examination of the cognitive and affective aspects of the aging process. The course covers the social, physiological, psychological, economic, and health aspects of aging, as well as service-delivery systems. It explores planning and action strategies aimed at enhancing the quality of life and providing more adequate benefits and services for the older adult.

**GERO 112** Prof. Naughton, Dr. Wolfer
**Social Problems of Aging** 3 credits
This course is devoted to a study of the specific problems of the aged in American society, with particular attention at both individual and societal levels to issues of age, inequality in opportunities and rewards; of mental health, housing, minorities, and institutions; of crime and fear of victimization; of economic status, work, leisure, and retirement; of attractiveness, aging and sexuality; of drugs, doctors, nursing homes and hospitals.

**GERO 210** Dr. Rynn
**Aging Around the World** 3 credits
A cross-cultural approach looking at the ways in which a variety of societies deal with aging and the aged. The issues of work, economics, other types of expertise and different definitions of the aged are analyzed.

**GERO 212** Dr. Wolfer
**Aging and the Life Cycle** 3 credits
Rites of passage, age norms, and role rehearsals for life transitions; the life cycle in comparative cultures; sociological dimensions of adulthood and aging concerning the work cycle, sport and leisure development, patterns of consumer behavior and life style, and the family cycle.

**GERO 214** Prof. Borsuk
**Aging and Human Behavior** 3 credits
A critical examination of life satisfaction in old age; the social and psychological factors which affect it; factors contributing to the psychological well-being of older adults as a function of their position in the social system.

**GERO 216** Prof. Pryle
**Aging and the Community** 3 credits
Consideration of selected community strategies effecting desired changes in the development and implementation of social services and programs for the elderly: legislative action, interagency relationships, the citizen role.

**GERO 218** Prof. Borsuk, Prof. Pryle
**Health and Aging** 3 credits
An explorative study of the mental and physical health problems prevalent in the older adult population, with emphasis upon the preventive aspect of health-care as applied by themselves and health-care providers. Health-care approaches appropriate to the various problems, and relevant resources within the home and community are considered.

**GERO 220** Atty. Cimini
**Crime and Aging** 3 credits
A consideration of crime as it affects aging; examining the older adult as victim, offender, practitioner, and perpetrator, in light of current thought, policy, and law.

**GERO 230** Prof. Pryle
**Social Policy and Aging** 3 credits
Review of major legislation affecting older adults, including the Social Security Act, Older Americans Act, Medicare, and various local, state, and national programs for the aged.

**GERO 232** Prof. Naughton
**Aging and Death** 3 credits
This course offers the student an opportunity to explore the mystery and meaning of death. Focus is on a number of aspects of dying and the death process, such as the dying individual and the family; cross-cultural perspectives; terminal illness; professions and death; rites and rituals.

**GERO 284** Staff
**Special Topics in Gerontology**
(Prerequisite: consent of the chairperson and the instructor) Courses designed to meet specific needs of individual students or courses offered on a trial basis to determine the value of placing them into the regular curriculum.

**GERO 382-383** Staff
**Independent Study** 3 credits
**in Gerontology**
Designed for advanced students who are capable of independent study. A program of planned research in gerontology under the guidance of a faculty member. Registration upon approval of the chairperson of the department and the instructor directing the study.

**GERO 480-481** Prof. Pryle
**Internship in Gerontology** 3 credits
(Prerequisite: permission of instructor) Supervised experiential learning in one or more organizations that serve older adults. Supervision by a faculty member and agency supervision required. Limited to Juniors and Seniors.

# THEOLOGY AND RELIGIOUS STUDIES

*DR. BRIGID CURTIN FREIN, Chairperson*

The religious dimension of human life is of such importance that it is necessary to explore it in a liberal-arts curriculum.

The General Education requirement for all students at the University demands six credit-hours in Theology, a requirement that is fulfilled by T/RS 121-122, a two-semester introductory sequence. These courses must be completed before students take upper-division courses in Theology. Additionally, students must take another three hours in either Philosophy or Theology/Religious studies to complete the GE Philosophy/Theology requirements. In addition to courses with a primarily Christian focus, the department also offers courses which deal with non-Christian religious traditions, among which are T/RS 314 (The Religions of the World) and T/RS 333 (The Jewish Way of Life).

The Bachelor of Arts degree in Theology/ Religious Studies requires 30 credits in the major including the introductory courses required of all students. To ensure a well-rounded background in the discipline, each major must take at least one course in each of the categories listed below. Theology majors must also take at least one semester of T/RS 490. Each major is expected to confer with the departmental chairperson for the selection and balancing of courses. The department also offers a double-major program compatible with most other majors.

Departmental courses are grouped into the following categories.

| | |
|---|---|
| Old Testament/New Testament | Historical Theology |
| Systematic Theology | Moral Theology |

**MINOR:** The minor in Theology/Religious Studies requires 18 credits: T/RS 121 and 122 plus four more courses. In choosing courses for a minor, students may concentrate in one area of theology (e.g., moral theology, historical theology, biblical studies) or they may select courses from several areas of theological inquiry.

**T/RS 121** Staff
**(P)Theology I:** 3 credits
**Introduction to the Bible**
A survey of central texts and themes of the Bible. Its purpose is to develop biblical literacy as well as skills in interpreting various literary forms and key theological concepts.

**T/RS 122** Staff
**(P)Theology II: Introduction** 3 credits
**to Christian Theology**
(Prerequisite: T/RS 121) A survey of key Christian themes: creation, Christ's incarnation and redemption, the Church and sacraments, Christian personhood, and the practice of prayer, virtue, and hope for the future.

**T/RS 184C** Dr. S. Mathews
**(P,W)Inside the** 3 credits
**Catholic Tradition**
This introduction to Catholic tradition will study its scope, depth, and on-going development, reception, and characteristics. Topics covered include faith and revelation, the intercommunion of scripture and tradition, the role of the Magisterium and the development of doctrine. Selected readings are taken from important conciliar texts and theologians.

**T/RS 204** Dr. Frein
**(P)Pauline Letters** 3 credits
An introduction to the writings of the Apostle Paul, exploring Jewish and Greco-Roman influences on his letters as well as his contribution to basic Christian beliefs and practices.

# THEOLOGY/RELIGIOUS STUDIES

| | Dept. and No. | Descriptive Title of Course | Credits FALL | SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| MAJOR (GE T/RS) | T/RS 121-122 | Theology I/Theology II | 3 | 3 |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | 3 | |
| GE PHIL | PHIL 120 | Introduction to Philosophy | 3 | |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE QUAN | MATH ELECT | Quantitative Reasoning Elective | | 3 |
| GE S/BH | S/BH ELECT | Social-Behavioral Electives | | 3 |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **16** | **16** |
| | | **SECOND YEAR** | | |
| MAJOR | T/RS ELECT | Second-Year Elective | 3 | 3 |
| COGNATE | COGNATE ELECT | Electives | 3 | |
| GE NSCI | NSCI ELECT | Natural-Science Electives | 3 | 3 |
| GE S/BH | S/BH ELECT | Social-Behavioral Electives | | 3 |
| GE PHIL | PHIL 210 - ELECT | Ethics-Phil. Electives | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **16** | **16** |
| | | **THIRD YEAR** | | |
| MAJOR | T/RS ELECT | Electives | 3 | 6 |
| COGNATE | COGNATE ELECT | Electives | 9 | 9 |
| GE ELECT | ELECT | Electives | 3 | 3 |
| | | | **15** | **18** |
| | | **FOURTH YEAR** | | |
| MAJOR | T/RS 490 | Topics in Theological Investigation | | 3 |
| MAJOR | T/RS ELECT | Electives | 6 | |
| COGNATE | COGNATE & ELECT | Electives | 9 | 9 |
| GE FREE | ELECT | Electives | 3 | 3 |
| | | | **18** | **15** |

**Total: 130 CREDITS**

**T/RS 206** Dr. Frein
**The Four Gospels** 3 credits

A study of the four Gospels from the perspectives of history, theology and literature.

**T/RS 207** Dr. Shapiro
**(D,P)Jews, Christians, and the Bible** 3 credits

A survey of ancient and modern ways of reading the Bible. The focus will be on a group of central biblical figures whose stories will be examined in the context of ancient Israelite history and society. The biblical stories will then be compared with later elaborations by Jewish and Christian interpreters.

**T/RS 210** Staff
**The Christian Religious Tradition** 3 credits

A study of the vital growth of Christianity's life, doctrine, worship and spirituality over the centuries. Special emphasis will be placed on principal leaders, thinkers and heroes.

**T/RS 211** Dr. Benestad
**Great Books I:** 3 credits
**Perspectives on Western Culture**

The religious, philosophical and political writings of major thinkers of the Western tradition. The first semester includes the study of the Bible, Aristotle's Ethics, Plato's Apology, Augustine's City of God, and the thought of Aquinas. Emphasis is on the study of these works as they illuminate the current world.

**T/RS 212** Fr. Sable, S.J.
**Saints and Holiness** 3 credits

An inquiry into the nature of Christian sanctity by an examination of the lives and accomplishments of traditional saints and of contemporary persons who respond to the Gospel message.

**T/RS 213** Fr. Sable, S.J.
**American Catholic Thought** 3 credits
The major themes of American Catholic tradition from colonial times to the present are placed in their historical, religious, social and political context.

**T/RS 215** Dr. E. Mathews
**(P)Early Christian Writers** 3 credits
This course is designed to provide an introduction to the main figures, theological currents and ideas of the formative period of the history of Christian theology by a close reading of selected texts from the major authors of the first six centuries of the Church.

**T/RS 217** Dr. Shapiro
**(P,D)The Holocaust in Context: History and Theology** 3 credits
An exploration of the Holocaust through the perspective of the history of anti-Semitism. The course will examine the historical aspects of the Holocaust as well as the moral and theological issues raised by it.

**T/RS 218** Dr. Johnson
**(P)Development of Christian Thought to 1100** 3 credits
A survey of the principal theological, spiritual and institutional developments in the first millennium of the Church's life.

**T/RS 219** Dr. Johnson
**(P)Development of Christian Thought 1100 to 1800** 3 credits
Survey of the principal theological, spiritual, and institutional developments in the Church in the medieval, reformation, and early modern periods.

**T/RS 220** Fr. Begley, S.J.
**(P)Spirituality: Liturgy and Sacraments** 3 credits
A basic course in sacraments which will explore the human religious experience of the faith community and its expression in sacramental celebration. Two features of the Rite of Christian Initiation of Adults, its process-orientation and the role of the community, will serve as basis for the examination of new sacramental models. Throughout the course, specific attention will be given to the development of a sacramental spirituality.

**T/RS 221** Dr. Steele
**Prayer** 3 credits
Introduction to the nature, purpose, and method of prayer in the Catholic Christian tradition.

**T/RS 222** Fr. Liberatore
**(P)Introduction to Liturgical Theology** 3 credits
This course will consider the relationship between Liturgy and Theology, as realities in the Christian life which form and inform one another. Fundamental documents of the Roman liturgy will be introduced, with an eye toward discerning insights into God, Christ, the Church, the sacraments and the human person which are embodied therein.

**T/RS 223** Dr. Johnson
**(P,W)Heaven and Hell** 3 credits
Besides studying the origins of the Christian belief in the afterlife, the course will also focus on Catholic and Protestant formulations of the doctrines of salvation and damnation as well as literary responses to the notions of heaven and hell.

**T/RS 224** Dr. Kopas, O.S.F.
**(P)Theology of the Person** 3 credits
A study of the religious dimensions of personal existence that correlates Christian tradition and contemporary experience. The course develops the topics of identity, self-understanding, creatureliness, sin and the influence of gender on a theological interpretation of personhood.

**T/RS 225** Fr. Sable, S.J.
**Introduction to the Theology of the Byzantine Churches** 3 credits
The Byzantine theological tradition develops special emphases within the mainstream of the Christian tradition. This course introduces the student to the study of some of the specifically Byzantine contributions to the understanding of the Christian mystery, with particular emphasis on early developments.

**T/RS 226** Fr. Sable, S.J.
**(P)Introduction to Eastern Liturgies** 3 credits
A survey of the Eastern Eucharistic Liturgies with particular emphasis on the structure, history, and liturgical theology of the Byzantine Liturgy of St. John Chrysostom.

**T/RS 227** Dr. Kopas, O.S.F.
**(P)Christ in Tradition and Culture** 3 credits
Examines the meaning and message of Jesus Christ as understood and communicated in the faith of his followers with special consideration given to the symbolic dimensions and cultural aspects of that Christian understanding.

**T/RS 228** Dr. Bader-Saye
**Protestant Traditions** 3 credits
An exploration of the Reformation vision of theology covering the roots and principles of Protestant ways of dealing with such topics as the nature of the Church, redemption, ethics, God, and Jesus.

**T/RS 229** Dr. Pinches
**Modern Protestant Thought** 3 credits
This course will survey the past two centuries of Protestant thought with an emphasis on the theological roots of contemporary Protestant Liberalism and Evangelicalism. Other current debates among Protestants today and their ecumenical discussions with Catholics will also be presented.

**T/RS 230** Msgr. Bohr, Staff
**Moral Theology** 3 credits
A study of the Christian moral tradition, its history and principles. Among areas to be treated are: the family, sexual activity and human rights.

**T/RS 231** Drs. Benestad, Pinches
**(P) Social Ethics** 3 credits
This course will prepare students to recognize ethical dimensions of political, economic and social issues through the study of the following: pertinent writings of Pope Paul VI and Pope John Paul II, a classic work of political theory, and several contemporary writings on such issues as morality, foreign policy and economic justice.

**T/RS 232** Dr. Benestad
**John Paul II and Catholic Social Thought** 3 credits
This course will explore the dialogue between the Catholic Church and modern ideologies on social and political matters. Readings include pertinent documents of the Second Vatican Council and recent papal writings, especially those of Pope John Paul II.

**T/RS 233** Dr. Bader-Saye
**(P,W)Suffering** 3 credits
This course examines the way in which Christians and Jews narrate their suffering in the context of God's purposes. Traditional formulations of "the problem of evil" will be critiqued, and the concept of redemptive suffering will be explored.

**T/RS 234** Sr. Foley, C.N.D.
**(P;D)Twentieth-Century Peacemakers** 3 credits
A study of some of the principles and methods of "waging peace" found in the lives and writings of Mohandas Ghandi, Dorothy Day, Thomas Merton and Martin Luther King.

**T/RS 235** Dr. Pinches
**(P)The Theology of Birth and Death** 3 credits
This course will investigate the meaning and significance of the birth and death of human beings in the Christian tradition. Related topics will be: suicide, euthanasia, capital punishment, contraception and abortion.

**T/RS 236** Prof. Casey,
**(P,W)Prophets and** Dr. Bader-Saye
**and Profits: the Economy in the Christian Life** 3 credits
An inquiry into the witness of the Church in regards to questions of wealth, business, economics and formulation of public policy. Biblical sources, Church tradition, and contemporary narratives will be employed to assess the common good.

**T/RS 237** Prof. Casey
**Politics: A Christian Perspective** 3 credits
An inquiry into the role of the state, the Church and the individual in political life. Special attention is given to the problem of violence; the course is set in the unique American perspective of Church-State relations.

**T/RS 238** Dr. Benestad
**Nietzsche and Christianity** 3 credits
A focus on Nietzsche's relation to and critique of Western thought in general and Christian thought in particular. Nietzsche's deep influence on contemporary theology and philosophy will be shown through extended readings from his collected works.

**T/RS 239** Staff
**Theology for the Twentieth Century** 3 credits
An introduction to the problems and methods of studying theology today. This course will begin with an overview of some of the main themes of twentieth-century theological thought, and will then move on to a study of one of the century's leading Catholic theologians: Karl Rahner. Emphasis will be placed on the integration of a plurality of philosophical approaches with the theological tradition and with questions of the present day.

**T/RS 303** Dr. Frein
**Jesus for the Gentiles: An Introduction to the Gospel of Luke** 3 credits
The primary purpose of this course is a close reading of the Third Gospel. Although the primary focus will be on the text rather than on methods of analysis, appropriate attention will be paid to literary forms, historical background and responsible interpretation.

**T/RS 304** Dr. S. Mathews
**John's Gospel and Letters** 3 credits
A close look at the Fourth Gospel and the Epistles of John with an emphasis on their literary, historical, and theological characteristics.

**T/RS 305** Dr. S. Mathews
**(P)The Apocalypse of St. John** 3 credits
This introduction to the last book of the Bible will emphasize the literary forms and thought patterns of apocalyptic literature as well as the historical and theological character of the book itself, highlighting both textual interpretation and contemporary relevance.

**T/RS 306** Dr. S. Mathews
**Job and the Psalter** 3 credits
A close look at the wisdom literature of the Old Testament. The study of both the Book of Psalms and the Book of Job will emphasize theological themes.

**T/RS 307** Drs. S. Mathews, Frein
**Passion and Resurrection Narratives** 3 credits
A study of the theology of each of the Gospels by an analysis of the key narratives of the Passion and Resurrection in the four Gospels.

**T/RS 308** Dr. S. Mathews
**(P)The Great Prophets** 3 credits
An examination of the four major prophets of the Old Testament: Isaiah, Jeremiah, Ezekiel and Daniel, with an emphasis on the study of selected texts.

**T/RS 309** Dr. S. Mathews
**(P)The Heart of the Old Testament** 3 credits
An in-depth look at the five books of Moses (Genesis, Exodus, Leviticus, Numbers and Deuteronomy) using ancient and modern exegetical views to examine and emphasize the central theme of the Covenant.

**T/RS 310** Fr. Rousseau, S.J.
**(P)Religion and the American People** 3 credits
An exploration of the great religious developments, persons, and questions in the life of the American people from the beginnings to the present day.

**T/RS 311** Staff
**Liturgical Theology of Byzantine Churches** 3 credits
A survey of the various elements of the liturgical life of the Byzantine tradition, examining the way that tradition is shaped and expresses itself as well as the underlying influences of faith upon that formation and practice.

**T/RS 312** Fr. Sable, S.J.
**Jesuit Spirit** 3 credits
The Society of Jesus (Jesuits): Its spirituality, tradition and history from their sixteenth-century origins in the Spiritual Exercises of St. Ignatius of Loyola through the contemporary period, with special emphasis on Jesuit theological and cultural contributions to the Church.

**T/RS 313** Dr. Pinches
**(P)Faith and Healing: God and Contemporary Medicine** 3 credits
This course will consider the history of Western medicine in the light of a range of Christian notions such as that life is a gift from God, that the body is good, that illness is a (limited) evil, that health is a responsibility. In this light, the idea that medicine is a calling and healing an art will be considered.

**T/RS 314** Staff
**(D,P)The Religions of the World** 3 credits
An exploration of belief in the traditions of the classical historical religions of the world through both systematic analysis and the reading of sacred texts.

**T/RS 315** Dr. Kopas, O.S.F.
**(D,P)Women in Christianity** 3 credits
An exploration of some of the major roles women have played in Christian thought and experience, including their contributions as disciples, spiritual guides, and social critics. Will also examine assumptions about male and female identities and consider challenges to traditional roles.

**T/RS 316** Sr. Foley, C.N.D.
**(P,W)God and the Earth** 3 credits
This course will explore the way human beings relate to the land and to other life forms and how this relationship is affected by belief in God. Biblical and other theological texts from Christianity and other religious traditions will be considered.

**T/RS 318** Sr. Foley, C.N.D.
**Models of the Church** 3 credits
A brief survey of various expressions of the Church's nature and mission throughout its history, from the New Testament through Vatican II. Exploration of some contemporary approaches, including liberation and feminist theology, and such as questions as: what and who is the "true Church"? where is it located? what is the place of Mary in the life of the Church?

**T/RS 319** Dr. Kopas, O.S.F.
**(P,D)Women's Spiritual/ Autobiographical Writing** 3 credits
(Prerequisite: permission of instructor)
This course explores women's written expressions of their spiritual lives. Readings, which include spiritual autobiographies and other writings, both classic and contemporary, focus on women's experience and understanding of the divine-human relationship. Seminar format; limited to 18 students.

**T/RS 321** Staff
**(P)Friendship and the Christian Life** 3 credits
This course will explore friendship as a central practice of the Christian life, especially the moral and spiritual life, and examine virtues such as fidelity, forgiveness, and love which are essential for sustaining and nurturing friendships.

**T/RS 322** Dr. Kopas, O.S.F.
**(P)Approaches to God** 3 credits
A study of some of the ways religious thinkers have approached the topic of God. Will include consideration of biblical, classical, and contemporary ways of understanding God as well as a selection of artistic, cultural, and imaginative perspectives on God.

**T/RS 323** Fr. Liberatore
**(P)Signs and Symbols** 3 credits
An introduction to the symbolic character of human existence in general, and of the sacramental life of the Church in particular. Beginning with a consideration of the

students' own experience of the symbolic character of their existence, the first part of the course will examine leading theories of why symbols are needed and how they work. Utilizing a definition of Catholic sacraments which focuses on their essentially symbolic nature, the course will then undertake a study of why sacraments are needed and how they work.

**T/RS 324** Dr. Benestad
**Spiritual Classics** 3 credits
A study of the autobiographies of St. Augustine and St. Teresa of Avila *(The Confessions and Life of Teresa of Jesus).* As an introduction to the study of the spiritual life, John Paul II's Sign of Contradiction is read.

**T/RS 325** Fr. Levko, S.J.
**Eastern Christian Spirituality** 3 credits
A study of the meaning of the spiritual life for Eastern Christian writers with a particular emphasis upon Sts. Athanasius, Gregory of Nyssa and Gregory Palamas. Themes such as prayer, image of and likeness with God, discernment of spirits, hesychasm and icons will be discussed.

**T/RS 326** Prof. Casey
**(P,D,W)The Church and Contemporary Social Issues** 3 credits
Explores the religious and ethical dimensions of social issues such as prejudice and violence. The findings of related social sciences and literature are placed in the context of Christian anthropology to give the student a concrete view of their interrelationship.

**T/RS 327** Prof. Casey
**Belief and Unbelief** 3 credits
A multidisciplinary inquiry into the nature of Faith in the Catholic tradition with special attention to the challenges of modernity.

**T/RS 328** Dr. Frein
**(P)Wealth and Poverty in the Biblical Tradition** 3 credits
A study of the presentation of various economic issues in the Old and New Testaments, including wealth and poverty as signs of God's favor, as creating obligations to care for and protect the poor and as involving both rights and responsibilities.

**(P) T/RS 330** Drs. Benestad, Pinches
**Biomedical Ethics** 3 credits
This course will present theological reflections on the two main ethical theories undergirding contemporary biomedical ethics. It will also present and discuss relevant philosophical and theological arguments on such issues as abortion, care of handicapped infants, euthanasia, suicide, and the profession of medicine.

**T/RS 331** Drs. Benestad, Pinches, Bader-Saye
**(P)Christian Ethics** 3 credits
This course will discuss the practice of the Christian moral life in contemporary society. The Christian virtues will be distinguished and related to selected problems arising in our lives as private individuals, as members of families, as professionals, and as citizens. Other topics to be treated include: evil, sin, Christian liberty, Christian perfection, relativism and humanism.

**T/RS 332** Dr. Pinches
**Christian Ethics in America** 3 credits
An exploration of the discussion of American theologians, since 1900, of the moral, social, and political implications of Christianity, including such concerns as the relation between the Christian Church and the nation-state and the status of America as a Christian nation.

**T/RS 333** Dr. Shapiro
**(P,D,W)The Jewish Way of Life** 3 credits
As a global introduction to Judaism this course will examine: essential beliefs, holidays and life ceremonies, Jewish history and modern Judaism, especially the Holocaust, the State of Israel and the Coming to America.

**T/RS 334** Dr. Shapiro
**(P)Jewish and Christian Approaches to Ethics** 3 credits
A survey of Jewish and Christian approaches to ethics and ethical problems. This course will examine the biblical and religious foundations of both Jewish and Christian ethics, ethics as a human construct and ethical case studies. Students who take T/RS 337 may not take T/RS 334.

**T/RS 335** Dr. Shapiro
**(P,D,W)Judaism in the Time of Jesus** 3 credits

A study of first-century Jewish religious sects as well as the cultural, political, and historical setting of the Roman Empire in which Jesus lived and preached and where monotheism continued to develop.

**T/RS 336** Fr. Rousseau, S.J.
**(P)Contemporary Case Studies in Theology** 3 credits

This course attempts to develop Christian insights into a series of specific moral dilemmas or cases through continued class discussion.

**T/RS 337** Dr. Shapiro
**(P,D,W)Jewish Approaches to Ethics** 3 credits

A survey of Jewish approaches to ethics and ethical problems with comparisons to other religious traditions and the writings of secular ethicists. Students who take T/RS 334 may not take T/RS 337.

**T/RS 338** Dr. Pinches
**Jesus and the Moral Life** 3 credits

A study of how the life of Jesus and the theological claims Christians make about his person relate to the moral life. Historical resources of the first century will be considered as well as contemporary writings in Christian ethics.

**T/RS 339** Fr. Rousseau, S.J.
**(P)An Exploration of Catholic Identity** 3 credits

This course focuses on certain characteristic features of the Catholic experience of Christianity. It is ecumenically sensitive to other Christian Churches and the common core of beliefs shared by all while at the same time trying to examine what is distinctive about being Catholic. It does so by exploring a number of key themes in Catholic tradition, history and life. It should be of interest not merely to Catholic students but to others who have wanted to be better informed about their Catholic friends and even the mission of the University of Scranton, in an irenic, non-polemical context.

**T/RS 400** Dr.Frein
**Introduction to Old Testament Exegesis** 3 credits

An introduction to the primary methods and problems of Old Testament interpretation: its historical background, the theological analysis and synthesis of major sections, as well as the use of source, form, and redaction criticism and such more recently developed approaches such as social, scientific, literary, and feminist criticism.

**T/RS 439** Dr. Steele
**(P,D,W)Psychology Spirituality** 3 credits

(Prerequisite: PSYC 110) This course explores selected Christian and Buddhist traditions of spirituality as understood by their practitioners and from the perspective of representative theorists or schools of Western psychology. The course concludes by assessing positive and negative aspects of these psychological approaches for understanding and evaluating spiritual experience.

**T/RS 480** Staff
**Internship in Theology/ Religious Studies** 1-3 credits

(Prerequisite: Junior standing; 15 credits of Theology/Religious Studies) Theology majors and minors can receive credits for a variety of ministerial experiences. Approval must be obtained beforehand from supervising faculty member and chairperson. Internship credits can be placed in the cognate or free area; they do not count toward the 30 credits needed for a Theology major or the 18 credits needed for a Theology minor.

**T/RS 490** Staff
**Topics in Theological Investigation** 3 credits

A capstone seminar required for theology majors, recommended for minors and available to other qualified students with permission of instructor. Topics will vary from semester to semester depending on student interest and faculty expertise. The use of primary sources and research appropriate to the specific topic will be emphasized. Students may take more than one semester of this course.

# INTERDISCIPLINARY COURSES *

**INTD 100**
**Freshman Seminar** 1 credit

Freshman seminars, whether linked to specific majors or to a student's general field of study (business, humanities, natural science, social science or health science), are designed to foster students' successful integration into academic and community life at The University of Scranton. Seminars, which offer freshmen an opportunity to work individually and in small groups with their faculty and fellow students, provide a focussed and individualized way to create an effective approach to university life so that each student's potential is realized and each student's goals for achievement are met. Individual seminars will focus both on the topics necessary to all students engaged in study at the University of Scranton and on particular topics applicable to a student's major or field of interest. Topics common to all freshman seminars include: the nature and purpose of higher education; time management; the character and mission of a Jesuit university; academic-development strategies; the role of the faculty; University resources; personal values. Other topics will vary by department or unit offering the seminar and be tailored to meet the common interests of the students and the instructors.

**INTD 103** Staff
**The Vietnam Experience** 3 credits

The historical origins of the Vietnam War, including the period of French colonialism and the American intervention; the politics, economics, and military strategy in Vietnam during the war years and today; present relations with China and the USSR. Why were we there and why did we fail?

**INTD. 105** Drs. Homer, McInerney
**Great Lives: Images on Stage** 3 credits

An examination of the often contrasting impressions of historical personalities, as they are portrayed in plays and films and as they appear to historians. Historical figures to be considered include Caesar, Richard III, Thomas More, Lincoln and Churchill.

**INTD 108** Staff
**Health & Legal Implications of Chemical/Drug Abuse** 3 credits

A team-taught course that deals with the neurophysical, health, and legal implications of alcohol/drug abuse, viz: its biochemical effects and aspects, its legal and social consequences, and its health and lifestyle implications.

**INTD 209** Profs. Schaffer, Homer, Dunn,
**(D)The Holocaust** Rowe, and Fiedrichs 3 credits

An exploration of the cataclysmic event in Jewish history known as the Holocaust. The course will examine the subject from the perspective of various academic disciplines – historical, sociological, philosophical, artistic, and literary, among others -- and will include a field trip to the Holocaust Museum in Washington, D.C.

**INTD 211** Drs. Harrington, Sulzinski
**(D,E)HIV/AIDS: Biological, Social and Cultural Issues** 3 credits

(Prerequisite: C/IL 102 or equivalent) Study of the biology of HIV and AIDS, including fundamentals of infectious disease, immunology, and virology. The impact of the epidemic is examined in relation to the differing experiences of various social groups and countries. The epidemiology of the disease and the response of health-care systems and governments are explored. Opportunity for American Red Cross certification in basic HIV facts and eligibility for HIV Instructor certification will be included as part of the course. Open to all majors.

**INTD 224** Dr. Dutko
**(Q, W)Science,** 3 credits
**Decision-Making and Uncertainty**
A study of decision-making as it relates to scientific and public policy matters. The course covers philosophical, mathematical and psychological aspects of decision-making in the face of uncertain evidence. Topics include the nature of scientific evidence; probabilistic evidence and the law; uncertainty and medicine; and other issues such as nuclear power, waste disposal, and strategic nuclear planning. Reading taken from contemporary sources.

**INTD 333** Drs. Dunn, Mathews
**The Bible in Image and Text** 3 credits
This team-taught course is a study of the interpretation of major biblical stories and figures in the Christian theological tradition and in art history. The marriage of Christian text and image is a natural and long-lived one; it provides an exciting way to integrate knowledge of various major themes such as creation and last judgement, and of many great biblical figures, such as Moses and Christ. Students will learn to read the images and visualize the text.

**NSCI 102** Dr. Baril, Prof. S. Casey
**Science and Society** 3 credits
This course attempts to show how the sciences, particularly the behavioral sciences, impact both positively and negatively on society. Issues dealt with include the nature of science, similarities and differences between the scientific disciplines, the impact of science on the concept of free will, and the philosophical and moral implications of psychological testing, socio-biology, and Skinnerian radical behaviorism.

**NSCI 201** Dr. Carey
**(E)Science and the** 3 credits
**Human Environment** A brief study of the effects of technological, scientific and industrial progress on the air, land, and water resources of the human environment. Problems in each of the resource areas will be discussed in detail.

*Interdisciplinary courses are team-taught courses which vary from semester to semester. They may be used to fulfill appropriate General Education requirements as specified in the course-schedule bulletin.

# The Kania School of Management

The vision of The Kania School of Management is to prepare students to make lasting contributions to their organizations and communities.

**Accreditation**

The Kania School of Management is accredited by the International Association for Management Education (AACSB) on both the undergraduate and graduate levels.

# MISSION STATEMENT

The Mission of The Kania School of Management is to contribute to a Jesuit, liberal arts education by preparing students to meet the educational requirements for success in leadership, management, team membership, and other productive roles in business and related fields, and to provide service to the broad University community. The Kania School of Management provides for the development of knowledge, skills, interpersonal and communication capabilities, attitudes and values that will enable students to assume positive, influential roles in their work organizations and society. This process integrates the foundation for lifelong learning and decision making with a clear sense of ethical responsibilities and a sensitivity to cultural and demographic diversity. Our mission supports the University's Statement of Mission - to provide professional and pre-professional programs "designed to meet the standard of the appropriate professional fields, and to develop students who have a clear sense of the ethical responsibilities which these fields demand of their successful practitioners."

The Kania School of Management is a member of the SAP University Alliance. This program enhances the value of the curriculum by placing the latest information technology in the classroom to give the next generation of business leaders a real-world advantage. The school has a fully operational SAP R/3 system for instructional use. Members of the faculty have been specifically trained by SAP America and are integrating Enterprise Resource Planning systems in appropriate classes.

# DEPARTMENTAL PROGRAMS

Nine programs are available in the Kania School of Management: Accounting-Track in Financial Accounting, Accounting-Track in Managerial Accounting, Electronic Commerce, Enterprise Management Technology, Finance, International Business, Management, Marketing, and Operations Management. In addition, a B.S. in Economics is jointly offered with the College of Arts and Sciences. These programs prepare the student for a career in business or for graduate study. In addition to the requirements of the major and the business core, students in The Kania School of Management will complete the same general education core as students in the other undergraduate colleges. At least 50 percent of the major and business core credits must be earned at the University of Scranton. Apart from minor exceptions, which require the explicit approval of the dean of the school, the student will spend the senior year in residence at the University.

# GRADUATION REQUIREMENTS

In order to graduate in a business major, in addition to the 2.00 minimum grade-point Average (GPA) overall, the student must have earned a minimum 2.00 GPA in both the major and business core coursework.

# MINORS

A minor in General Business is available to non-business students with the exception of students majoring in Chemistry-Business, Electronics-Business and Economics (SOM only). It will consist of 21 credits:

1. ECO 101- Current Economic Issues
2. ACC 253 - Financial Accounting
3. ECO 351 - Environment of Intl. Business
4. FIN 351 - Introduction to Finance
5. MGT 351 - Principles of Management
6. MKT 351 - Introduction to Marketing
7. OIM 471 - Business Information Management

The last five must be taken after the other courses, and may be taken no earlier than the junior year. Minors in Accounting, Economics, Electronic Business, Finance,

Management of People and Teams, Management of Structures and Systems, and Operations Management are described under those respective programs.

## BUSINESS COGNATE

Non-Business students with special needs may pursue a personal cognate in Business, but may not take more than 25 percent of their total credit hours in Business. With the approval of his or her advisor, the student is free to select a variable number of Business courses. However, the prerequisites stated in the catalog must be observed, and upper-division courses may not be taken before the junior year.

## MATH OPTIONS

Two math options are available to Business majors:

| Option I* (six credits) | Option II* (eight credits) |
|---|---|
| MATH 107 (Quantitative Methods II) | MATH 114 (Analysis I) |
| MATH 108 (Quantitative Methods III) | MATH 221 (Analysis II) |

Both options cover the topics of calculus. Option I takes an applied approach; Option II a theoretical approach.

*Students are tested for math placement during summer orientation. On the basis of these tests and their high school background it will be recommended that some students take Option II, especially if they expect to pursue graduate studies. The majority of students will be placed in Option I, and may also be required to take MATH 106 (Quantitative Methods I) as a prerequisite to taking MATH 107.

## THE BUSINESS LEADERSHIP PROGRAM

*DR. ROBERT L. McKEAGE, Director*

See page 348.

# ACCOUNTING

Accounting plays a vital role in the business and investment decisions made by the management, owners and creditors of organizations. Because of this important role, accounting has become known as the "language of business." To fulfill the needs of students entering this discipline, the Accounting Department of the University of Scranton offers majors in two tracks: Financial Accounting and Managerial Accounting. In addition, a combined Bachelor of Science/Master of Business Administration Degree program is available for students interested in professional certification in states requiring 150 credit hours of education.

Financial Accounting focuses on the needs of users outside of the organization, primarily investors and creditors. This accounting information facilitates the investment and credit decisions that are inherent in a market economy. The financial track is best suited for those students aspiring to become Certified Public Accountants (CPAs). While licensure of CPAs is separately governed by each state's legislative body, the Accounting Department provides students with opportunities to satisfy the education requirements of any state in which they may aspire to become certified. (Please refer to the combined B.S./M.B.A. degree program below.)

Managerial Accounting focuses on the information needs of users within the organization. This information aids in planning and controlling the organization's activities, and in evaluating the performance of the organization's segments and managers. The managerial accounting track is best suited for those students aspiring to become Certified Management Accountants (CMAs).

The success of our graduates is demonstrated by their job placements. Alumni are employed by Big Five, regional, and local public accounting firms, by many notable firms in private industry, as well as by governmental and not-for-profit organizations. Students have opportunities for on-the-job training through our internship program.

**Combined Bachelor of Science/Master of Business Administration Degree Program**

The Accounting Department of the University of Scranton offers interested and qualified students the opportunity to earn both a Bachelor of Science degree in accounting and a Masters of Business Administration degree with an accounting specialization. While this program may benefit any student interested in the accounting discipline, the program was developed in response to the adoption by most states of a 150-credit-hour educational requirement to become a Certified Public Accountant. With judicious course scheduling, most students can complete the program within five academic years.

Students interested in this BS/MBA degree program should apply to The Graduate School as prescribed by The Graduate School Catalog as early as December of their junior year at The University of Scranton. Criteria for acceptance into the combined program include the student's previous academic performance, GMAT score, letters of recommendation and statement of purpose. Students admitted into this combined BS/MBA degree program may elect to follow either the Financial Accounting track or the Managerial Accounting track described above. Students must adhere to The Graduate School Catalog requirements.

**Minor in Accounting**

The Accounting minor provides students of any major with an understanding of the language of business, thus serving to expand their career possibilities. The minor also serves as an excellent foundation for students who might later pursue a graduate business

degree or law degree. The minor consists of four required courses (ACC 251 and ACC 252 OR ACC 253 and ACC 254, and ACC 361 and ACC 363), plus two elective courses (any 300 or 400 level accounting courses). Therefore, business students (and other students who are required to take two semesters of sophomore-level accounting) can complete the minor by taking four accounting courses beyond the two accounting courses that are required of their major. Other students can complete the minor by taking no more than six accounting courses. Interested students should contact their advisor in the KSOM Advising Center.

## ACCOUNTING-FINANCIAL ACCOUNTING TRACK

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **SPRING** |
| GE S/BH | ECO 153-154 | Prin. of Micro-Macro Economics | 3 | 3 |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE PHIL | PHIL 120 | Introduction to Philosophy | 3 | |
| GE T/RS | T/RS 121 | Theology I | | 3 |
| GE C/IL | C/IL 104 | Computing and Information Literacy | | 3 |
| GE QUAN | MATH-ELECT[1] | Math Option-2 courses | 3-4 | 3-4 |
| GE HUMN | HUMN ELECT | Humanities Elective | 3 | |
| GE FSEM-PHED | INTD 100-PHED ELECT | Freshman Seminar/Physical Education | 1 | 1 |
| | | | **16-17** | **16-17** |
| | | **SECOND YEAR** | | |
| BUS CORE | ACC 251-252 | Financial Accounting I-II | 3 | 3 |
| BUS CORE | STAT 251-252 | Statistics for Business I-II | 3 | 3 |
| BUS CORE | MGT 251 | Legal Environment of Business | | 3 |
| GE PHIL-T/RS | PHIL 210-T/RS 122 | Ethics-Theology II | 3 | 3 |
| GE NSCI | NSCI ELECTIVES | Natural Science Electives | 3 | 3 |
| GE HUMN | HUMN ELECTIVES | Humanities Electives | 3 | 3 |
| GE ELECT | ELECT[3] | Free Elective | 3 | |
| | | | **18** | **18** |
| | | **THIRD YEAR** | | |
| MAJOR | ACC 361-362 | Intermediate Accounting I-II | 3 | 3 |
| MAJOR | ACC 363-364 | Federal Taxes-Auditing | 3 | 3 |
| BUS CORE | MGT 351-352 | Principles of Management I-II | 3 | 3 |
| BUS CORE | FIN 351-MKT 351 | Intro. to Finance-Intro. to Marketing | 3 | 3 |
| BUS CORE | OIM 351-OIM 352 | Intro. to Mgt. Science-Intro. to Oper Mgt. | 3 | 3 |
| BUS CORE | ECO/IB 351 | Environment of Intl Business | | 3 |
| GE PHILor T/RS | Phil or T/RS | Elective | 3 | |
| | | | **18** | **18** |
| | | **FOURTH YEAR** | | |
| MAJOR | ACC 460-ELECT[4] | Adv. Accounting-Major Elective | 3 | 3 |
| MAJOR | ACC 461-ELECT[4] | Cost Accounting-Major Elective | 3 | 3 |
| BUS CORE | OIM 471-MGT 455 | Bus. Info. Mgt.-Bus. Policy & Strategy | 3 | 3 |
| GE HUMN | HUMN ELECT[2] | Humanities Elective | 3 | |
| GE ELECT | ELECT | Free Electives | 3 | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **16** | **13** |

**Total: 133-135 CREDITS**

[1] See note on Math Options on page 220.

[2] If EDUC 113 is required in the first semester, it is taken in place of a humanities elective and is counted as a GE free elective. One GE free elective in the fourth year must then be taken as a humanities elective.

[3] If a third math course is required, it replaces this GE elective.

[4] Major electives for the Financial Accounting track are ACC 365, 470, 472, 473, 474, 475 and 480. Students who plan to sit for the CPA examination in New York or New Jersey need six credits of finance and six credits of law. For the additional course in finance, one of FIN 361, FIN 362, or FIN 475 is recommended. ACC 470 is recommended for the additional law course.

# ACCOUNTING-MANAGERIAL ACCOUNTING TRACK

| | Dept. and No. | Descriptive Title of Course | Credits FALL | Credits SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| GE S/BH | ECO 153-154 | Prin. of Micro-Macro Economics | 3 | 3 |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE PHIL | PHIL 120 | Introduction to Philosophy | 3 | |
| GE T/RS | T/RS 121 | Theology I | | 3 |
| GE C/IL | C/IL 104 | Computing and Information Literacy | | 3 |
| GE QUAN | MATH-ELECT[1] | Math Option-2 courses | 3-4 | 3-4 |
| GE HUMN | HUMN ELECT | Humanities Elective | 3 | |
| GE FSEM-PHED | INTD 100-PHED ELECT | Freshman Seminar/Physical Education | 1 | 1 |
| | | | **16-17** | **16-17** |
| | | **SECOND YEAR** | | |
| BUS CORE | ACC 251-252 | Financial Accounting I-II | 3 | 3 |
| BUS CORE | STAT 251-252 | Statistics for Business I-II | 3 | 3 |
| BUS CORE | MGT 251 | Legal Environment of Business | | 3 |
| GE PHIL-T/RS | PHIL 210-T/RS 122 | Ethics-Theology II | 3 | 3 |
| GE NSCI | NSCI ELECTIVES | Natural Science Electives | 3 | 3 |
| GE HUMN | HUMN ELECTIVES | Humanities Electives | 3 | 3 |
| GE ELECT | ELECT[3] | Free Elective | 3 | |
| | | | **18** | **18** |
| | | **THIRD YEAR** | | |
| MAJOR | ACC 361-362 | Intermediate Accounting I-II | 3 | 3 |
| MAJOR | ACC 461-365 | Cost Acctg.-Federal Tax of Corp. | 3 | 3 |
| BUS CORE | MGT 351-352 | Principles of Management I-II | 3 | 3 |
| BUS CORE | FIN 351-MKT 351 | Intro to Finance-Intro. to Marketing | 3 | 3 |
| BUS CORE | OIM 351-OIM 352 | Intro. to Mgt. Science-Intro. to Oper. Mgt. | 3 | 3 |
| BUS CORE | ECO/IB 351 | Environment of Intl. Business | | 3 |
| GE PHIL or T/RS | Phil or T/RS | Elective | 3 | |
| | | | **18** | **18** |
| | | **FOURTH YEAR** | | |
| MAJOR | ACC 462-ELECT[4] | Adv. Mgrl. Accounting-Major Elective | 3 | 3 |
| MAJOR | ACC ELECTIVES[4] | Major Electives | 3 | 3 |
| BUS CORE | OIM 471-MGT 455 | Bus. Info. Mgt.-Bus. Policy & Strategy | 3 | 3 |
| GE HUMN | HUMN ELECT[2] | Humanities Elective | 3 | |
| GE ELECT | ELECT [2] | Free Electives | 3 | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **16** | **13** |

**Total: 133-135 CREDITS**

[1] See note on Math Options on page 220.
[2] If EDUC. 113 is required in the first semester, it is taken in place of a humanities elective and is counted as a GE free elective. One GE free elective in the fourth year must then be taken as a humanities elective.
[3] If a third math course is required, it replaces this GE elective.
[4] The major electives for the Managerial Accounting track are ACC 363, 460, 470, 471, 472, 474, 475 and 480.

**ACC 210** Staff
**Survey of Managerial and Financial Accounting** 3 credits
A foundation course for ACC 502. Coverage of recording transactions, adjusting and closing entries, and preparing financial statements; the form and content of each financial statement; and the principles underlying accounting treatment of economic events. Managerial accounting terminology, concepts and cost classification; the cost of goods manufactured and sold statement; and the budgeting process. Not open to students needing 6 credits in introductory accounting.

**ACC 251** Staff
**Financial Accounting I** 3 credits
(For ACC and FIN majors) A survey of accounting principles, concepts and procedures. Includes financial statements, the information-processing cycle, cash, receivables, inventory costing methods, plant and equipment, intangibles, and current liabilities.

**ACC 252** Staff
**Financial Accounting II** 3 credits
(Continuation of ACC 251 for ACC and FIN majors; prerequisite: ACC 251) A study of long-term liabilities, owners' equity of corporations and partnerships, the cash-flow statement, and cost analysis and accumulation.

**ACC 253** Staff
**Financial Accounting** 3 credits
(For non-accounting and non-finance majors) A survey of the accounting cycle, basic financial statements, theory and techniques of income, asset, and liability recognition.

**ACC 254** Staff
**Managerial Accounting** 3 credits
(Continuation of ACC 253 for non-accounting and non-finance majors; prerequisite: ACC 253) Includes completion of the financial accounting sequence, methods of cost accumulation and assignment and methods useful in managerial decision making.

**ACC 361** Drs. Carpenter, Mensah
**Intermediate Accounting I** 3 credits
(Prerequisite: junior standing, ACC 252) A comprehensive study of contemporary accounting theory, concepts and procedures and their application to the asset classifications on the balance sheet. Current pronouncements of the various accounting organizations relevant to assets will be emphasized.

**ACC 362** Drs. Carpenter, Mensah
**Intermediate Accounting II** 3 credits
(Prerequisite: ACC 361) Application of contemporary accounting theory to liabilities and stockholder's equity classifications of the balance sheet. Current pronouncements of accounting organizations relevant to liabilities and owners' equity accounts will be emphasized.

**ACC 363** Dr. Linton, Staff
**Federal Taxes** 3 credits
(Prerequisites: junior standing, ACC 252) An introductory course covering pertinent phases of federal income taxation. Emphasis on business transactions, preparation of individual returns, and finding the answers to federal tax questions.

**ACC 364** Dr. Ellis, Staff
**Auditing Theory** 3 credit
(Prerequisite: ACC 361) Regulatory, legal, ethical, and technical issues related to the independent audit service. Examination of auditing standards, statistical methods and techniques involved in the examination of certain transaction cycles.

**ACC 365** Dr. Linton, Staff
**Federal Taxation of Corporations and Partnerships** 3 credits
(Prerequisite: ACC 252) An introduction to the taxation of C and S corporations and partnerships, including analyses of the tax consequences of their formation, operation, and liquidation.

**ACC 460** Drs. Mahoney, Mensah
**Advanced Accounting I** 3 credits
(Prerequisite: ACC 362) The theories and promulgated standards of accounting related to multiple business units, including accounting for business combinations, consolidated financial statements, minority interest, and branch accounting. Also covered is governmental and nonprofit accounting.

**ACC 461** Drs. R.J. Grambo, Johnson,
**Cost Accounting** Lawrence, Staff
3 credits
(Prerequisites: junior standing, ACC 252) Theories, techniques and procedures in cost accumulation, reporting and control, including such topics as job-order costs, process costs, by-products and joint-products costing, and standard cost and variance analysis.

**ACC 462** Drs. R.J. Grambo, Johnson,
**Advanced Managerial Accounting** Lawrence
3 credits
(Prerequisite: ACC 461) Accounting techniques as control devices in business with emphasis on the use of accounting data in business decisions. Topics to include budgeting and profit planning, cost-volume-profit analysis and direct costing.

**ACC 470** Dr. Linton, Staff
**Law for Accountants** 3 credits
(Prerequisite: MGT 251) A study of the law of contracts, sales, commercial paper, secured transactions, rights of debtors and creditors, and bankruptcy.

**ACC 471** Dr. R.J. Grambo, Staff
**Management Auditing** 3 credits
(Prerequisite: ACC 362) An in-depth examination of the accountant in the manager's position. Includes administrative effectiveness and efficiency as provided through sound internal controls, and design and implementation of monitoring systems within the organization to promote better cost-benefit decisions.

**ACC 472** Drs. Mahoney, Mensah, Staff
**Advanced Accounting II** 3 credits
(Prerequisite: ACC 362) A study of the theories and promulgated standards of accounting related to international operations, partnerships, estates and trusts, installment sales, consignments, SEC reporting, and interim financial reporting.

**ACC 473** Dr. Ellis, Staff
**Advanced Auditing** 3 credits
(Prerequisite: ACC 364) An examination of statistical analysis in making audit judgements; internal control and auditing issues relating to EDP systems; risk assessment and testing for certain transaction cycles; and other attestation services and reports.

**ACC 474** Dr. R.J. Grambo, Staff
**Accounting Information Systems** 3 credits
(Prerequisite: ACC 362) The design and application of accounting systems in both the manual and automated environments. Analysis of information's accumulation and use patterns in organizations with a focus on providing useful and timely information. Extensive computer usage of Professional Business Software.

**ACC/IB 475** Dr. Lawrence, Staff
**International Accounting** 3 credits
(Prerequisites: ACC 252 or 254, and ECO 351) This course is designed for both accounting and non-accounting majors with an interest in global accounting issues. The environmental influences on accounting development, reporting standards for selected countries, and the harmonization of accounting standards are explored. Additional topics covered include financial reporting and statement analysis, accounting for foreign currency translation and transactions, and managerial accounting issues for multinational business entities.

# ECONOMICS/FINANCE

*DR. SATYAJIT GHOSH, Chairperson*

The major in Economics, which is available both through The Kania School of Management and The College of Arts and Sciences, provides an excellent training for understanding the economic events and developments of our complex industrialized society and of the world economies. It equips the student with training and background needed to assume responsible managerial positions in industry, commerce, banking, or government service. It also gives a strong preparation for the pursuit of graduate studies in Economics or the legal profession.

**MINOR:** 18 credits consisting of ECO 153, 154, (or ECO 101,102) 361, 362, plus two upper level ECO courses (SOM majors may not use ECO 351).

**ECONOMICS**

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **SPRING** |
| MAJOR (GE S/BH) | ECO 153-154 | Principles of Micro-Macro Economics | 3 | 3 |
| GE WRTG-SPCH | COMM 100-WRTG 107 | Public Speaking-Composition | 3 | 3 |
| GE PHIL | PHIL 120 | Introduction to Philosophy | 3 | |
| GE T/RS | T/RS 121 | Theology I | | 3 |
| GE C/IL | C/IL 104 | Computing and Information Literacy | | 3 |
| GE QUAN | MATH[1] | Math Option-2 courses | 3-4 | 3-4 |
| GE HUMN | HUMN ELECT [2] | Humanities Elective | 3 | |
| GE FSEM-PHED | INTD 100-PHED ELECT | Freshman Seminar-Physical Education | 1 | 1 |
| | | | **16-17** | **16-17** |
| | | **SECOND YEAR** | | |
| MAJOR | ECO 361-362 | Intermediate Micro-Macro Econ. | 3 | 3 |
| MAJOR | STAT 253 | Statistics for Economics | | 3 |
| COGNATE[4] | ACC 253 | Financial Accounting | 3 | |
| COGNATE[4] | ELECT | Cognate Elective | | 3 |
| GE PHIL-T/RS 122 | PHIL 210-T/RS 122 | Ethics-Theology II | 3 | 3 |
| GE NSCI | NSCI ELECT | Natural Science Electives | 3 | 3 |
| GE HUMN | HUMN ELECT | Humn. Electives (HIST 110-111 recom.) | 3 | 3 |
| GE ELECT | ELECT[3] | Free Elective | 3 | |
| | | | **18** | **18** |
| | | **THIRD YEAR** | | |
| MAJOR | ECO/IB 351-ECO/IB 375 | Env. of Intl. Bus.-Intl. Economics | 3 | 3 |
| MAJOR | ECO 363 | Applied Econometrics | 3 | |
| MAJOR | ECO 460 | Monetary & Fin. Eco. | 3 | |
| COGNATE[4] | FIN 351 - ELECT | Intro. to Fin.-Cognate Electives | 3 | 6 |
| GE PHIL or T/RS | PHIL or T/RS | Elective | | 3 |
| GE ELECT | ELECT | Free Elective | | 3 |
| COGNATE[4] | ELECT | Cognate Elective | 3 | |
| | | | **15** | **15** |
| | | **FOURTH YEAR** | | |
| MAJOR | ECO ELECT | Economics Elective | 3 | |
| MAJOR | ECO SEM - ECO 471 | Eco. Seminar-Advanced Macro. | 3 | 3 |
| COGNATE[4] | COGNATE ELECT | Cognate Electives | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | | 3 |
| GE ELECT | ELECT | Free Electives | 6 | 6 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **16** | **16** |

**Total: 130-132 CREDITS**

[1] See note on Math Options on page 220.

[2] If EDUC 113 is required in the first semester, it is taken in place of a humanities elective and is counted as a GE free elective. One GE free elective in the fourth year must then be taken as a humanities elective.

[3] If a third math course is required, it replaces this GE elective.

[4]. Economics majors may apply up to six cognate credits toward a math minor. Students taking the sequence open to Math majors are strongly urged to complete the calculus sequence by taking MATH 222, particularly if they plan on pursuing graduate studies.

Economics majors registered in The Kania School of Management will apply nine of their elective cognate credits to one of the following areas (exceptions require the permission of the SOM dean): accounting, finance, international business, management, marketing, operations management. The remaining cognate credits may be applied to the social sciences or from the other business areas (but note that no more than 30 credits altogether can be taken in business subjects, exclusive of economic courses). Care must be taken to observe prerequisites.

**ECO 101** Staff
**(S)Current Economic Issues** 3 credits
Intended to provide a foundaton in economics for non-business students. This course provides economic analysis of contemporary economic issues relevant to the U.S. economy in particular and the world in general. Issues such as economic policy, budget deficit, federal debt, recession, unemployment, inflation, health care, environment, and regulation of business are studied. Tools of micro and macroeconomic analysis are developed in the context of these issues. Not open to Economics majors or students with credit for ECO 153-154.

**ECO 102** Staff
**Fundamentals of** 3 credits
**Economic Analysis**
Designed to provide students who have minimal mathematical background an understanding of economics through application of basic quantitative methods. Statistical concepts and mathematical models are discussed and applied, using electronic spreadsheets to examine issues critical to business firms, households, society, and economy in the aggregate. Not open to Economics majors.

**ECO 153** Staff
**(S)Principles of** 3 credits
**Microeconomics**
(Formerly ECO 152) This course centers on the salient characteristics of the modern free-enterprise economy. Topics include the operations of the price system as it regulates production, distribution, and consumption, and as it is in turn modified and influenced by private groups and government. International economics is also covered.

**ECO 154** Staff
**(S)Principles of** 3 credits
**Macroeconomics**
(Formerly ECO 151) This course analyzes the determinants of aggregate economic activity. The main areas studied are the monetary and banking system, the composition and fluctuations of national income, and inflation, all as influenced by monetary and fiscal policy.

**ECO 200** Dr. Ralph Grambo, Staff
**(S)Economic Security** 3 credits
**and Personal Finance**
A survey of the practical approaches to achieving economic security. Topics include risk management, essentials of budgeting, savings, and credit planning, planning for taxes, investments, retirement and estates. This course is not open to Economics or Business majors or minors.

**ECO 300** Dr. Scahill, Staff
**The Economics of** 3 credits
**Environmental Issues**
This course provides students with a framework for viewing environmental issues as economic issues. The operation of a system of markets and prices and the sources of "market failure" are explained. Alternative methods for addressing environmental problems are examined, including "command and control" regulatory policies and "market-based" policies. The evolution of public policies toward the environment is discussed. This course is not open to Economics majors or minors, Business majors or minors.

**ECO/IB 351** Dr. Trussler, Dr. Bose
**(D)Environment of** 3 credits
**International Business**
(Prerequisites: ECO 153 & 154; junior standing) This course introduces the student to the growing field of international business, touching on the economic, social and political environments of international trade and multinational corporations. International institutions and agencies that impact on international business are discussed and practical aspects of these topics are emphasized.

**ECO 361** Dr. Ghosh, Dr. Nguyen
**Intermediate Microeconomics** 3 credits
(Prerequisite: ECO 153) This course centers on the analysis of production and cost-theories. The topics studied are pure competition, monopoly, oligopoly, monopolistic competition and factor pricing. Economics majors take in sophomore year; Finance majors in the junior year.

**ECO 362** Dr. Ghosh, Dr. Nguyen
**Intermediate Macroeconomics** 3 credits
(Prerequisite: ECO 154) Course centers on the study of national income accounting, price-level fluctuations, issues of unemployment, full employment, and impact of monetary and fiscal policy on income level and distribution. Economics majors take in sophomore year; Finance in junior year.

**ECO 363** Dr. Nguyen
**Applied Econometrics** 3 credits
(Prerequisites: ECO 361, ECO 362, STAT 253) This course deals with the modeling and estimation of relationships as applied to economics. The topics covered include single-equation structural modeling and time-series modeling; estimation methods and problems; testing of economics hypotheses; and forecasting. The emphasis of the course is on applications involving the use of actual data.

**ECO 364** Dr. Corcione
**Labor Economics and Labor Regulations** 3 credits
(Prerequisites: ECO 153-154) Analysis of labor supply and demand; measurement theory of unemployment; occupational choice; wage differentials; labor-market issues and policies; labor legislation.

**ECO 365** Dr. Ghosh
**Mathematical Economics** 3 credits
(Prerequisites: ECO 361, ECO 362, STAT 253, MATH 107, MATH 108) This course studies the methodology of modern economic analysis. Emphasis is placed on developing the rigorous theoretical foundations of micro and macroeconomics using tools of calculus and linear algebra. Topics such as comparative static analysis, general -equilibrium analysis, consumer and firm behavior, intertemporal decision-making, decision-making under uncertainty, theory of growth and rational-expectation hypothesis are covered.

**ECO 366** Dr. Trussler
**Economic Geography** 3 credits
(Prerequisites: ECO 153-154) This course will examine the broad areas of the spatial organization of economic systems and the location of economic activity. The discussion will encompass spatial decision-making for manufacturing industries, the service sector, and agricultural enterprises. The role of transportation in determining optimal locations and optimal flow of goods, information, and people will be emphasized. The spatial organization of the growth and development of cities and regions will also be discussed, as will the related topic of the development of nations within the global economy.

**ECO/IB 375** Drs. Bose, Scahill
**International Economics** 3 credits
(Prerequisites: ECO 153, 154; and ECO 351 or permission of the instructor). This course explains the rationale for international trade and gains from trade and discusses various trade policies. Topics covered in the course include: comparative advantage, free trade and trade restrictions (tariffs, quotas, etc.), the trade policy of the United States, exchange rates and their determinants, balance-of-payments analysis and the significance of multinational corporations.

**ECO 410** Dr. Scahill
**Economics for Education Majors** 3 credits
Provides an introduction to fundamental economic concepts as well as a review of techniques and materials (print, audio-visual, etc.) that can be used to teach economics at the K-12 grade levels. Emphasis is placed on strategies designed to integrate economics into such courses as language arts, mathematics and social studies. The course is intended for education majors and may not be used as a substitute for other economics courses.

**ECO 460** Drs. Corcione, Nguyen
**Monetary and Financial Economics** 3 credits
(Prerequisite: ECO 362, FIN 351) This course emphasizes the interrelations between financial markets, financial institutions and aggregate economic activity. Topics include: an overview of financial institutions, introduction to money and capital markets, fundamentals of interest rates, the money supply process, the conduct of monetary policy, and other subjects that occupy the subject matter of money and financial markets.

**ECO 461** Dr. Scahill
**Managerial Economics** 3 credits
(Prerequisite: ECO 361) Teaches the use of economic tools for managerial decision making. Topics include discussion of applicable economic, statistical and computer skills. Emphasis is on the microeconomic theory of the firm and how this is applied.

**ECO 462** Drs. Trussler, Ghosh
**Urban and Regional Economics** 3 credits
(Prerequisites: ECO 361, 362) Tools, measurements and theories utilized in studying the economy of urban areas and regions. Issues such as growth, decline, housing, poverty and environmental concerns examined in a public policy context.

**ECO 463** Dr. Bose
**Public Finance and Taxation** 3 credits
(Prerequisite: ECO 362) Government expenditures, budgets, intergovernmental fiscal relations, public debt, fiscal policy and the principles of taxation.

**ECO 464** Dr. Ghosh
**Environmental Economics and Policy** 3 credits
(Prerequisite: ECO 361) This course provides a detailed and rigorous introduction to the subject matter of environmental economics. Topics include the economic effects and control of pollution, the optimal use of natural resources (e.g., land, water, minerals, fishery and forests) and formulation and evaluation of environmental policy.

**ECO 465** Dr. Ghosh
**Development Economics** 3 credits
(Prerequisites: ECO 153, 154) This course introduces students to contemporary development economics. Topics include: the concept and measurement of economic development, the problems and prospects of the less developed countries, and the alternative theories and processes of economic development.

**ECO 470** Dr. Corcione
**Law and Economics** 3 credits
(Prerequisite: ECO 361 or permission of the instructor) This course focuses on the public-policy implications of law and economics. It is based on the notion that legal rules establish implicit prices for different types of behavior and the consequence of these rules can be analyzed using microeconomics. In particular, microeconomic theory is used to analyze economic aspects of property, contracts, torts, and crime.

**ECO 471** Dr. Ghosh
**Advanced Macroeconomics** 3 credits
(Prerequisites: ECO 362; 460, 363 or permission of the instructor) This course centers on the study of recent advances in macroeconomic analysis. Topics include empirical macroeconomic analysis, open-economy macroeconomics, the role of economic policy and economic growth.

# ELECTRONIC COMMERCE

DR. PRASADARAO KAKUMANU, Chairperson, Operations and Information Management Department

Electronic commerce is an emerging business environment that provides common business services, multimedia content publishing and secure interactive web sites by integrating back-end and front-end applications. The necessary electronic commerce infrastructure is provided by integrating information and telecommunication technologies, the Internet and the World Wide Web, and business models that incorporate security, privacy, and legal issues. Electronic commerce lets companies reach new markets, operate around the clock, shorten product development cycle, enhance customer service, reduce or eliminate inventory related costs, and create enterprise links-all at lower costs. The phenomenal growth in online commerce increases the demand for people with skills in areas such as electronic commerce infrastructure, new business initiatives, law and security, electronic payment, financial services, and interactive marketing. The program below develops the knowledge and skills necessary for linked organizations in the new millenium.

**MINOR**: To minor in Electronic Commerce the student must take a minimum of 18 credits. Three courses are required: C/IL 104 (or equivalent), EC 251, and OIM 471 and any three of the following: EC 361, EC 362, EC 370, EC 371, EC 372, EC 461, EC 462, EC 470, or EC 471.

## ELECTRONIC COMMERCE

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **SPRING** |
| GE S/BH | ECO 153-154 | Prin. of Micro-Macro Economics | 3 | 3 |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 3 | 3 |
| GE PHIL | PHIL 120 | Introduction to Philosophy | | 3 |
| GE T/RS | T/RS 121 | Theology I | 3 | |
| GE C/IL | C/IL 104 | Computer and Information Literacy | | 3 |
| GE QUAN-ELECT | MATH[1] | Math Option-2 courses | 3-4 | 3-4 |
| GE HUMN | HUMN ELECT[2] | Humanities Elective | 3 | |
| GE FSEM/PHED | INTD 100-PHED ELECT | Freshman Seminar-Physical Education | 1 | 1 |
| | | | **16-17** | **16-17** |
| | | **SECOND YEAR** | | |
| BUS CORE | ACC 253-254 | Financial-Managerial Accounting | 3 | 3 |
| BUS CORE | STAT 251-252 | Statistics for Business I-II | 3 | 3 |
| BUS CORE | MGT 251 | Legal Environment of Business | | 3 |
| GE PHIL-T/RS | PHIL 210-T/RS 122 | Ethics-Theology II | 3 | 3 |
| MAJOR | EC 251 | Introduction to Electronic Commerce | 3 | |
| BUS CORE | OIM 471 | Business Information Management | | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | 3 | 3 |
| GE ELECT | ELECT[3] | Free Elective | 3 | |
| | | | **18** | **18** |
| | | **THIRD YEAR** | | |
| MAJOR | EC 361 | Electronic Business Comm. Networks | 3 | |
| MAJOR | EC 362 | Database Mgt. for Electronic Business | | 3 |
| MAJOR | EC ELECT | EC Electives | 3 | 3 |
| BUS CORE | MGT 351-352 | Principles of Management I-II | 3 | 3 |
| BUS CORE | MKT 351-FIN 351 | Intro to Marketing-Intro to Finance | 3 | 3 |
| BUS CORE | OIM 351-OIM 352 | Intro to Mgt. Science-Intro to Oper Mgt. | 3 | 3 |
| BUS CORE | ECO/IB 351 | Environment of Intl. Business | 3 | |
| GE PHIL or T/RS | PHIL or T/RS | Elective | | 3 |
| | | | **18** | **18** |
| | | **FOURTH YEAR** | | |
| MAJOR | EC 461 | Internet Applications Development | 3 | |
| MAJOR | EC 462 | Projects in Electronic Business | | 3 |
| MAJOR | EC ELECT | EC Elective | | 3 |
| BUS CORE | MGT 455 | Business Policy & Strategy | 3 | |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | |
| GE NSCI | NSCI ELECT | Natural Science Electives | 3 | 3 |
| GE ELECT | ELECT | Free Electives | 3 | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **16** | **13** |

**Total: 133-135 CREDITS**

[1] See note on Math Options on page 220.
[2] If EDUC 113 is required in the first semester, it is taken in place of a humanities elective and is counted as a GE free elective. The GE free elective in the fourth year must then be taken as a humanities elective.
[3] If a third math course is required, it replaces this GE elective.

**EC 251** Dr. Nabil Tamimi
**Introduction to Electronic Business** 3 credits
(Prerequisite: C/IL 104) This introductory course in electronic business explores how the Internet has revolutionized the buying and selling of goods and services in the marketplace. Topics covered include: business-to-business and business-to-consumer electronic commerce, electronic commerce infrastructure, designing and managing online storefronts, payment acceptance and security issues, and the legal and ethical challenges of electronic commerce. Students will also gain hands-on experience in creating, editing, and enhancing a web site using an HTML editor.

**EC 361** Dr. Prasad Kakumanu
**Electronic Business Communication Networks** 3 credits
(Prerequisite: EC 251) The course is designed to provide students with networking and telecommunications fundamentals necessary to develop enterprise networks to conduct business on the Internet. Topics covered include: communication network media; processors and protocols; multimedia transmission; wireless networks; network design, management and security; and present capabilities and future trends in communication. Discussion of the technology is focused on business applications within and among organizations. Hands-on experience and case studies will be used to illustrate concepts and business use of enterprise networks.

**EC 362** Dr. Prasad Kakumanu
**Database Management for Electronic Business** 3 credits
(Prerequisites: EC 251, OIM 471) The course deals with database design, implementation and use of Database Management Systems to support Electronic Business. Topics covered include: database design and implementation; data modeling and structured query language (SQL); distributed data base management system, open data base connectivity, integration of web server and backend database server; data warehousing and mining; on-line analytical processing; and database application and management. Cases and DBMS software will be used to illustrate concepts and to gain hands-on experience.

**EC 370** Drs. Zych, Chattopadhyay
**Interactive Marketing** 3 credits
(Prerequisite: MKT 351, junior standing) This course focuses on the integration of state-of-the-art interactive technologies in the design and implementation of marketing programs for the new millenium. The functions of market identification through customer analysis, and the planning and implementation of conception, pricing, promotion and distribution of ideas, goods and services to satisfy the market benefit immensely from the capabilities of the rapidly developing information technology (IT) infrastructure.

**EC 371** Dr. Murli Rajan
**Investments** 3 credits
(Prerequisite: FIN 351, junior standing) This course will provide students with an overview of the fundamentals of investing, with specific emphasis on the use of information technology tools. Topics will broadly cover the areas of stock selection and valuation, bond valuation, and the use of options and futures to hedge risk. Students will be taught to use resources available on the Internet in order to develop security selection rules and valuation models. For example Quicken.com and Hoovers have web sites that enable an investor to retrieve current financial data and build stock screens. Students will also learn to build a financial web site that contains features found in many professional web sites.

**EC 372** Dr. Ron Grambo
**Accounting for** 3 credits
**Electronic Business**
(Prerequisite: ACC 252 or ACC 254, junior standing) This course is intended to introduce E-Commerce students to the role of accounting in today's business environment. Students will examine how technology has impacted the techniques of accounting and reporting. Computerized models of accounting will be used to explore the tools available to compile data for management decisions and reporting. Internet business and traditional business transactions will be evaluated in light of global markets. Thus students will see the effects of control features built into software systems and understand the role such systems play in running the company.

**EC 461** Dr. Prasad Kakumanu
**Internet Applications Development** 3 credits
(Prerequisites: EC 361, EC 362) The course introduces the student to existing and evolving Internet technologies needed for electronic commerce site development and management. Topics covered include: Windows NT, Internet information server, index and transaction servers, object-oriented paradigm, client and server side scripting, active server page, enterprise data access, domain name service, and trends in web development tools. The course emphasizes applications of the technology and provides hands-on experience by having students develop a working electronic business site. Cases will be used to illustrate concept and the role of each technology used to conduct business on the web.

**EC 462** Dr. Prasad Kakumanu
**Projects in Electronic Business** 3 credits
(Prerequisite: EC 461) In this course, students will develop an electronic commerce project that will be used to conduct online business. The purpose of this course is to synthesize the Internet related technologies and the business knowledge acquired in different courses to develop a working electronic commerce site. Students will work in a team-oriented environment under the guidance of the instructor. Students will design, develop, implement, and operate a secure content-rich electronic commerce web site to attract and retain customers.

**EC 470** Dr. Chattopadhyay
**Supply Chain Management** 3 credits
(Prerequisites: EC 361, EC 362) This course integrates two powerful trends that are critical management imperatives for the new millennium: Supply Chain Management & Electronic Business. The students will learn how the principles of supply chain management integrate into the "real-time" environment of e-business and examine case studies of such implementations. Latest software and technology will be discussed and examples demonstrated on the SAP R/3 platform available at KSOM.

**EC 471** Dr. Kakumanu, Mr. DeSanto
**Electronic Business Security,** 3 credits
**Controls and Ethics**
(Prerequisites: EC 361, EC 362) The course is designed to provide students with an understanding of the technical, managerial, legal and ethical issues to build, operate and manage e-commerce solutions. Topics covered include: web server and client security; secure transactions and payments; information security; digital certificates and practices; civil and criminal legal issues; morality and ethical issues; intellectual property and patents; governmental regulations and policies; and emerging technologies and standards. Appropriate cases will be used to illustrate the above concepts.

**EC 472** Dr. Prattipati
**Electronic Business** 3 credits
**and Entrepreneurship**
(Prerequisites: EC 361, EC 362) This course links electronic commerce with entrepreneurship. The convergence of information and communication technologies has created numerous opportunities to entrepreneurs to start new and innovative businesses based on electronic commerce. The course will examine the issues related to the starting and establishment of new businesses based on electronic commerce. The course com-

prises three parts. The focus of the first part is on issues related to the establishment of a new business and entrepreneurship. The second part examines the business issues related to electronic commerce including the development of business models and plans. The last part is a practical part where groups of students will develop and establish small electronic commerce businesses from start to finish. The learning will occur through study and discussion of conceptual reading material, analysis and discussion of cases, and through the development and implementation of an e-commerce business.

## ENTERPRISE MANAGEMENT TECHNOLOGY

*DR. SATYA N. PRATTIPATI, Program Director*

The major in Enterprise Management Technology (EMT) is a general management program with emphasis on information technology. The program's focus is on the integrated management of the whole enterprise rather than the management of individual functional areas. It is designed to produce graduates with expertise in integrated business processes and the use of Enterprise Management Planning systems popularly known as ERP systems. This program is enabled by a fully functional SAP R/3 system provided through the Kania School's alliance with SAP America. EMT courses build upon the foundation provided by core courses in all business areas. These courses are followed by more advanced courses in each functional area which use ERP systems to manage and integrate the processes. Project oriented courses including business consulting complete the program. The EMT major is a good choice for individuals desiring careers in information systems consulting or general management with an Information Technology emphasis. It is also an excellent preparation for graduate studies in business.

# ENTERPRISE MANAGEMENT TECHNOLOGY

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **SPRING** |
| GE S/BH | ECO 153-154 | Prin. of Micro-Macro Economics | 3 | 3 |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE PHIL | PHIL 120 | Introduction to Philosophy | | 3 |
| GE T/RS | T/RS 121 | Theology I | 3 | |
| GE C/IL | C/IL 104 | Computer and Information Literacy | | 3 |
| GE QUAN-ELECT | MATH[1] | Math Option-2 courses | 3-4 | 3-4 |
| GE HUMN | HUMN ELECT[2] | Humanities Elective | 3 | |
| GE FSEM/PHED | INTD 100-PHED ELECT | Freshman Seminar-Physical Education | 1 | 1 |
| | | | **16-17** | **16-17** |
| | | **SECOND YEAR** | | |
| BUS CORE | ACC 251-252 | Financial Accounting I-II | 3 | 3 |
| BUS CORE | STAT 251-252 | Statistics for Business I-II | 3 | 3 |
| BUS CORE | MGT 251 | Legal Environment of Business | | 3 |
| GE PHIL | PHIL 210 | Ethics | 3 | |
| GE T/RS | T/RS 122 | Theology II | | 3 |
| GE NSCI | NSCI ELECT | Natural Science Electives | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | 3 | 3 |
| GE ELECT | ELECT[3] | Free Elective | 3 | |
| | | | **18** | **18** |
| | | **THIRD YEAR** | | |
| MAJOR | EMT 351 | Business Process Overview | | 3 |
| MAJOR | EMT/ACC 367 | Enterprise Accounting and Control | | 3 |
| BUS CORE | FIN 351 | Introduction to Finance | 3 | |
| BUS CORE | MKT 351 | Introduction to Marketing | 3 | |
| BUS CORE | OIM 352 | Introduction to Operations Management | 3 | |
| BUS CORE | OIM 351 | Intro to Management Science | 3 | |
| BUS CORE | MGT 351-352 | Principles of Management I-II | 3 | 3 |
| BUS CORE | ECO/IB 351 | Environment of Intl. Business | 3 | 3 |
| GE PHIL or T/RS | PHIL or T/RS | Elective | | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | | 3 |
| | | | **18** | **18** |
| | | **FOURTH YEAR** | | |
| MAJOR | EMT/MKT 460 | Customer Support Systems | 3 | |
| MAJOR | EMT 461 | Enterprise Treasury Management | 3 | |
| MAJOR | EMT 462 | Production Planning and Control | 3 | |
| MAJOR | EMT 463 | Enterprise HR Systems | 3 | |
| MAJOR | EMT 470 | Enterprise Information Systems | | 3 |
| MAJOR | EMT 471 | Configuration and Consulting | | 3 |
| BUS CORE | MGT 455 | Business Policy and Strategy | | 3 |
| BUS CORE | OIM 471 | Business Information Management | | 3 |
| GE ELECT | ELECT | Free Electives | 3 | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **16** | **16** |
| | | | **Total: 133-135 CREDITS** | |

[1] See note on Math Options on page 220.

[2] If EDUC 113 is required in the first semester, it is taken in place of a humanities elective and is counted as a GE free elective. The GE free elective in the fourth year must then be taken as a humanities elective.

[3] If a third math course is required, it replaces this GE elective.

**EMT 351** Staff
**Business Process Overview** 3 credits
This is the first course in the area of Enterprise Management. Its main goal is to help students study and appreciate the integration of a company's core business processes. Students will be exposed to the main business processes that drive an organization, the interactions within and between them, and the effect of integration on the decision-making environment. As major tools for demonstrating business process integration and closely related issues such as business process re-engineering, this course uses an enterprise-wide integrated information systems software and simulated data for a model company.

**EMT/ACC 367** Staff
**Enterprise Accounting and Control** 3 credits
(Prerequisites: Acc 251 & 252 or Acc 253 & 254) This course is concerned with how accounting principles, methods, and techniques are harnessed to meet the reporting needs of an organization in an integrated management and information technology environment. It is designed to demonstrate the integration of both financial and managerial accounting procedures with the core business processes and organizational elements of an enterprise to produce enterprise-wide real- time reporting capabilities. Students will be exposed to the business processes and the integrated operation of accounting functions in a simulated model company that uses state-of-the-art systems software to capture data and share information. Students will acquire hands-on experience with enterprise software configuration and operation, but the main goal of the course is to teach the accounting and reporting goals implicit in such activities.

**EMT/MKT 460** Staff
**Customer Support Systems** 3 credits
(Prerequisites: EMT 351, Mkt 351)
An interdisciplinary approach to enterprise management that focuses on the customer is emphasized in this course. The objective of the course is to orient enterprise wide decision-making to successful customer relationship management on an ongoing basis. This is made possible by utilizing all available information to develop a shared view of the customer throughout the enterprise, and using best practice offerings that are tailored to the appropriate customer relationship life cycle stage. A state-of-the-art industry standard enterprise management software will be used as a platform for demonstration and simple project implementation.

**EMT 461** Staff
**Enterprise Treasury Management** 3 credits
(Prerequisites: EMT 351, Fin 351)
The analysis of decisions that constitute the liquidity related (working capital) decisions of the firm. These include the following areas: management of the firm's liquid resources: cash, short term investments, accounts receivable and inventory, management of the firm's access to borrowing, controlling the diverse dimensions of risk, managing the information flows needed to identify performance. This course includes topics and examples of Treasury Management using Enterprise Management Systems [SAP R/3]

**EMT 462** Staff
**Production Planning and Control** 3 credits
(Prerequisites: EMT 351, OIM 352)
This course is concerned with the study of production planning and control activities in an enterprise resource planning context. Topics include: aggregate planning, capacity planning, master production scheduling, material requirements planning, production activity control, purchasing, inventory models, and Just-in-Time systems. A particular focus of this course will be the interactions between operations and the other functional areas of the business. This will be demonstrated using Enterprise Management Systems software.

**EMT 463** Staff
**Enterprise HR Systems** 3 credits
(Prerequisites: EMT 351, Mgt 351
This course will describe and explain the preparation of job descriptions, demographics of labor resources, recruitment policies, interviewing techniques, hiring contracts, aptitude testing and performance evaluation, labor turnover and labor mobility, employee morale, complaints and grievances, disciplinary procedures, employee health and safety, wage and hour administration, and government regulations relating to labor. The handling of absenteeism, alcoholism, and drug addiction and other functional duties of a human resources department will also be covered. This course is fully integrated with the SAP HR system and includes: organizational structure, recruitment, employee management, career and succession planning, basic process flows in HR management, training and events management, business trip management, time management, work schedule and shift management, payroll accounting and cost planning.

**EMT 470** Staff
**Enterprise Information Systems** 3 credits
(Prerequisite: EMT 351)
This course is concerned with the management and operations of information systems in an integrated enterprise. It will examine the integrated business processes of an enterprise using the leading enterprise systems software. Students will analyze and study enterprise systems software in detail. Students will be exposed to the management of the enterprise systems software. They will learn about business integration through the concepts of business engineering and business workflow. This course will also examine the procedures used to generate analytical reports using the concepts of data mining and data warehousing.

**EMT 472** Staff
**Configuration and Consulting** 3 credits
(Prerequisite: EMT 351)
The focus of this course is on the implementation of enterprise systems projects and the role of consultants in such implementation. It will examine the integrated business processes of an enterprise, and the concepts of developing data models, business objects, and event process chains. Students will acquire the skills to develop implementation plans for enterprise systems software. The course will also discuss the configuration procedures in implementing enterprise systems software. Several real life cases of actual implementation of enterprise systems will be discussed. The role of consultants in the implementation process will be examined in detail. There will be guest lectures from practicing consultants and from the representatives of the companies who implemented the enterprise systems software. The goal of the course is to prepare the students to become consultants in enterprise systems.

# FINANCE

*DR. SATYAJIT GHOSH, Chairperson*

The practitioner in finance must be familiar with the tools and techniques available and, given the resources and constraints of organizations and the general economic environment in which the organization operates, be adept at efficiently managing the fiscal resources of the organization, including the raising of funds and their short-term and long-term investment. Career opportunities in Finance include:

| | | |
|---|---|---|
| Banking | Investments | Corporate |
| Bank Examiner | Financial Analyst | Financial Analyst |
| Trust Officer | Security Broker | WorkingCapital Management |

**MINOR:** 18 credits consisting of ECO 153, 154, 351, FIN 351 and two upper level Finance courses (from FIN 361, 362, 470, 471, 472 and 475.)

**FINANCE**

| | Dept. and No. | Descriptive Title of Course | Credits FALL | SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| GE S/BH | ECO 153-154 | Prin. of Micro-Macro Economics | 3 | 3 |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE PHIL | PHIL 120 | Introduction to Philosophy | 3 | |
| GE T/RS | T/RS 121 | Theology I | | 3 |
| GE C/IL | C/IL 104 | Computing and Information Literacy | | 3 |
| GE QUAN | MATH[1] | Math Option, 2 courses | 3-4 | 3-4 |
| GE HUMN | HUMN ELECT[2] | Humanities Elective | 3 | |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **16-17** | **16-17** |
| | | **SECOND YEAR** | | |
| BUS CORE | ACC 251-252 | Financial Accounting I-II | 3 | 3 |
| BUS CORE | STAT 251-252 | Statistics for Business I-II | 3 | 3 |
| BUS CORE | MGT 251 | Legal Environment of Business | | 3 |
| GE PHIL | PHIL 210 | Ethics | 3 | |
| GE T/RS | T/RS 122 | Theology II | | 3 |
| GE NSCI | NSCI ELECT | Natural Science Electives | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE ELECT | ELECT[3] | Free Elective | 3 | |
| | | | **18** | **18** |
| | | **THIRD YEAR** | | |
| MAJOR | ECO 361-362 | Intermediate Micro-Macro Economics | 3 | 3 |
| MAJOR | FIN 361 | Working Capital Management | | 3 |
| MAJOR | FIN 362 | Investments | | 3 |
| BUS CORE | MGT 351-352 | Principles of Management I-II | 3 | 3 |
| BUS CORE | FIN 351-MKT 351 | Intro. to Finance-Intro. to Marketing | 3 | 3 |
| BUS CORE | OIM 351-OIM 352 | Intro. to Mgt. Science-Intro. to Oper. Mgt. | 3 | 3 |
| BUS CORE | ECO/IB 351 | Environment of Intl. Business | 3 | |
| GE PHIL or T/RS | PHIL or T/RS | Elective | 3 | |
| | | | **18** | **18** |
| | | **FOURTH YEAR** | | |
| MAJOR | ECO 460-FIN ELECT | Monetary & Fin. Eco.-Fin. Elective | 3 | 3 |
| MAJOR | FIN 470-FIN ELECT | Capital Investment and Structure-Fin. Elec. | 3 | 3 |
| BUS CORE | OIM 471 | Business Information Management | | 3 |
| BUS CORE | MGT 455 | Business Policy & Strategy | | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | | 3 |
| GE ELECT | ELECT | Free Elective | 6 | |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **13** | **16** |

**Total: 133-135 CREDITS**

[1] See note on Math Options on page 220.
[2] If EDUC 113 is required in the first semester, it is taken in place of a humanities elective and is counted as a GE free elective. One GE free elective in the fourth year must then be taken as a humanities elective.
[3] If a third math course is required, it replaces this GE elective.

**FIN 351** Staff
**Introduction to Finance** 3 credits
(Prerequisites: junior standing, ECO 153; ACC 252 or 253, or permission of the instuctor) This course introduces the business student to the field of finance. It serves as the foundation course for financial principles used in both financial management and investment courses. Topics include time value of money, risk analysis, basic operation of the capital markets, current asset and liability analysis, and introduction to the topics of capital budgeting and cost of capital calculation.

**FIN 361** Dr. R.W. Grambo, Staff
**Working Capital Management** 3 credits
(Prerequisite: FIN 351) This course is designed to provide advanced study in the financial-management area through detailed analysis of financial statements, liquidity crises, cash optimization, credit analysis, banking arrangements, loan contracts, commercial paper and the use of money market.

**FIN 362** Dr. Rajan, Staff
**Investments** 3 credits
(Prerequisite: FIN 351) An introduction to the theory and process of managing investments. Topics include practical operation of the equity markets, debt options and futures markets. Stock-valuation models using fundamental technical and random walk approaches.

**FIN 470** Dr. Kallianiotis, Staff
**Capital Investment and Structure** 3 credits
(Prerequisite: FIN 351) Advanced study in the "permanent" financial aspects of the firm, including capital-budgeting models, optimal-replacement processes, abandonment, leasing, cost of capital, capital structure, mergers and acquisitions, and bankruptcy.

**FIN 471** Dr. Hussain, Staff
**Derivative Securities** 3 credits
(Prerequisite: FIN 362) Advanced work in speculation, hedging and arbitrage. Use of speculative markets for profit and risk adjustment. Options and futures pricing models, financial and index futures, and options, precious metals, and foreign exchange.

**FIN 472** Dr. Hussain, Staff
**Portfolio Management** 3 credits
(Prerequisite: FIN 362) Advanced study of professional management of various portfolios including those of banks, insurance companies, pension funds, and nonprofit institutions. Markowitz and Sharpe models, data availability, and computerized-data services are covered.

**FIN 473** Dr. Corcione, Staff
**Financial Institutions** 3 credits
(Prerequisite: ECO 362) The study of financial markets and financial institutions, including depository and nondepository institutions. Topics include regulation, operation, and management of financial institutions, financial instruments, interest-rate principles, risk-management strategies, loan analysis, and asset/liability management. Insurance and pension principles and investment banking are covered.

**FIN/IB 475** Dr. Kallianiotis
**International Finance Management** 3 credits
(Prerequisites: ECO 351, FIN 351) This course deals with the environment of international financial management, foreign-exchange risk-management, multinational working-capital management, international financial markets and instruments, foreign investment analysis, and management of ongoing operations. It also exposes students to a wide range of issues, concepts, and techniques pertaining to international finance.

# INTERNATIONAL BUSINESS

*DR. TRUSSLER, Program Director*

The major in International Business is an interdisciplinary program designed for those Business students who seek an understanding of the complex world within which multinational corporations, national and international agencies, and individuals interact. In the twenty-first century all business activities are becoming more and more international in nature; it is imperative that those who wish to succeed in this international setting have a clear understanding not only of the theory and practice of the core business disciplines, but also of their interaction with the geographic, cultural, and political environments within which multinational corporations operate, and international trade and investment occur. This major is designed to prepare students who wish to work in the international arena – either overseas or in the U.S.

**INTERNATIONAL BUSINESS**

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **SPRING** |
| GE S/BH | ECO 153-154 | Principles of Micro-Macro Economics | 3 | 3 |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 3 | 3 |
| GE PHIL | PHIL 120[2] | Introduction to Philosophy | | 3 |
| GE C/IL | C/IL 104 | Computing and Information Literacy | 3 | |
| GE QUAN | MATH[1] | Math Option-2 courses | 3-4 | 3-4 |
| GE HUMN | HUMN ELECT | Foreign Language Electives | 3 | 3 |
| GE FSEM-PHED | INTD 100-PHED ELECT | Freshman Seminar-Physical Education | 1 | 1 |
| | | | **16-17** | **16-17** |
| | | **SECOND YEAR** | | |
| BUS CORE | ACC 253-254 | Financial-Managerial Accounting | 3 | 3 |
| BUS CORE | STAT 251-252 | Statistics for Business I-II | 3 | 3 |
| BUS CORE | MGT 251 | Legal Environment of Business | 3 | |
| GE PHIL | PHIL 210 | Ethics | | 3 |
| GE T/RS | T/RS 121-122 | Theology I-II | 3 | 3 |
| GE NSCI | NSCI ELECT[3] | Natural Science Electives | 3 | 3 |
| GE ELECT | ELECT[5] | Foreign Language Electives | 3 | 3 |
| | | | **18** | **18** |
| | | **THIRD YEAR** | | |
| MAJOR | IB ELECT[4] | Advanced IB Electives | | 6 |
| BUS CORE | MGT 351-352 | Principles of Management I-II | 3 | 3 |
| BUS CORE | MKT 351-FIN 351 | Intro. to Marketing-Intro. to Finance | 3 | 3 |
| BUS CORE | OIM 351-OIM 352 | Intro. to Mgt. Science-Intro. to Oper Mgt. | 3 | 3 |
| BUS CORE | ECO/IB 351 | Environment of Intl. Business | 3 | |
| GE PHIL or T/RS | PHIL or T/RS | Elective | 3 | |
| GE HUMN | HUMN ELECT | Regional/Global Electives | 3 | 3 |
| | | | **18** | **18** |
| | | **FOURTH YEAR** | | |
| MAJOR | IB ELECT[4] | Advanced IB Electives | 6 | 6 |
| BUS CORE | MGT 455 | Business Policy & Strategy | 3 | |
| BUS CORE | OIM 471 | Business Information Management | | 3 |
| GE ELECT | ELECT[6] | Regional/Global Electives | 3 | 3 |
| GE ELECT | ELECT[3,5] | Free Electives | (3) | (3) |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **13(16)** | **13(16)** |
| | | | **Total: 130-132 (136-138)** | **CREDITS[5]** |

[1] See note on Math Options on page 220.

[2] If EDUC 113 is required, it is taken in place of PHIL 120. C/IL 104 is then moved to the spring of the first year. PHIL 120 will be taken in the second year.

[3] If a third math course is required, GE electives are moved from the fourth to the second year. The NSCI sequence is moved to the fourth year.

[4] Four of the five functional international business courses and two electives from IB 476, 490, ECO 366, 465 or the the fifth functional IB course.

[5] For students requiring EDUC 113 and a third math course, 6 additional credits are needed to complete the foreign-language requirement.

[6] Global Studies electives include GEOG 134 (recommended), PS 212, PS 213, T/RS 314. Regional Studies electives are courses that focus on specific countries or regions of the world (not U.S.), including culture courses taught in a foreign language.

**ECO/IB 351** Dr. Trussler/Staff
**(D)Environment of International Business** 3 credits
(Prerequisites: ECO 153 154; junior standing) This course introduces the student to the growing field of international business, including the economic, social, and political environments of international trade and multinational corporations. International institutions and agencies that impact on international business are discussed and practical aspects of these topics are emphasized.

**ECO /IB 375** Drs. Bose, Scahill
**International Economics** 3 credits
(Prerequisites: ECO 153, 154; and 351 or permission of the instructor) This course explains the rationale for international trade and gains from trade and discusses various trade policies. Topics covered in the course include: comparative advantage, free trade and trade restrictions (tariffs, quotas, etc.), the trade policy of the United States, exchange rates and their determinants, balance of payments analysis, and the significance of multinational corporations.

**ACC /IB 475** Drs. Johnson, Lawrence
**International Accounting** 3 credits
(Prerequisites: ACC 252 or 254, and ECO 351) This course is designed for both accounting and non-accounting majors with an interest in global accounting issues. The environmental influences on accounting development, reporting standards for selected countries, and the harmonization of accounting standards are explored. Additional topics covered include financial reporting and statement analysis, accounting for foreign currency translation and transactions, and managerial accounting issues for multinational business entities.

**FIN /IB 475** Dr. Kallianiotis
**International Finance Management** 3 credits
(Prerequisites: ECO 351, FIN 351) This course deals with the Environment of International Financial Management, the foreign exchange risk management, the multinational working capital management, the international financial markets and instruments, the foreign investment analysis, and the management of ongoing operations. It also exposes students to a wide range of issues, concepts, and techniques pertaining to international finance.

**MGT/IB 475** Dr. Chowdhury, Staff
**International Management** 3 credits
(Prerequisites: ECO 351, MGT 351) Designed as an advanced level undergraduate course on international business. Focuses on functional strategies of multinational corporations (MNCs), structure and control systems of MNCs, and comparative management. The specific MNC strategies to be covered include entry, sourcing, marketing, financial, human resource and public affairs. The study of structure and control systems delves into issues such as corporate structure, headquarters-subsidiary relationships. Study of comparative management systems focuses on nature of management systems and practices in different cultures. Projected as a mainly case oriented course.

**MKT /IB 475** Dr. Chattopadhyay
**International Marketing** 3 credits
(Prerequisites: MKT 351, ECO 351) Analysis of the marketing strategies of multinational corporations with emphasis on the internal environment of country markets. Discussions will include comparisons of different regional markets along socioeconomic, political and cultural dimensions. Different types of international market barricades and the corresponding market entry strategies will be analyzed. Additional readings from international publications will be required.

**IB 476** Dr. Bose
**U.S.-East Asia Trade and Investment** 3 credits
(Prerequisite: ECO 351) This course describes and analyzes trade and investment flows between the U.S. and Japan, China, Korea and Taiwan. Topics covered in the course include: economic trends in these countries, U.S. trade and investment with them, U.S. trade deficit, trade policies of the U.S. and these countries; analysis of Japan's KEIRETSU, Korea's CHAEBOL, China's MFN status and Taiwan's environmental problems.

**IB 477** Dr. Trussler
**European Business** 3 credits
(Prerequisite: ECO/IB 351) This course introduces the student to the European business environment, focusing on the implications for international business operations and competitiveness. This includes the study of rapidly changing business environments in Central and Eastern Europe (CEE) as well as the nations of the European Union (EU). The elimination of barriers to trade, and the response of companies inside and outside the EU to the threats and opportunities of the Single Market are examined. We also examine the impacts on business of the democratization of the CEE countries and their move toward market economies.

# MANAGEMENT

*DR. GERALD BIBERMAN, Chairperson*

Management involves getting things done through people. The management major provides students with a broad-based, generalist background that is designed to provide graduates with the skills and tools needed to cope successfully with the challenging roles and expectations that are sweeping through organizations. "Getting things done" involves analyzing, designing and continuously improving an organization's structure and processes. "Through people" involves leading, motivating, and working effectively with other people in teams and other settings. Management courses use a variety of teaching techniques that involve a high degree of student/faculty interaction–including experiential exercises, student presentations, simulations and team activities–to develop self-analytic skill, team and communication skills. Students working with their faculty and advisors can choose from a variety of courses to design a program of study that will prepare them to enter a variety of positions in private industry and other organizations.

**MINORS:**

**Management of Structures and Systems**—This minor focuses on the skills a successful manager needs to plan, organize, maintain, and improve an organization's structures and systems. The student will take MGT 351, 352, 460, 461, 462 and any upper-level management elective except MGT 455.

**Management of People and Teams**—This minor focuses on the skills a successful manager needs to meet the management challenges of people and teams in today's workplace. The student will take MGT 351, 352, 361, 362, 471 and any upper-level management elective except MGT 455.

# MANAGEMENT

| | Dept. and No. | Descriptive Title of Course | Credits FALL | Credits SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| GE S/BH | ECO 153-154 | Prin. of Micro-Macro Economics | 3 | 3 |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 3 | 3 |
| GE PHIL | PHIL 120 | Introduction to Philosophy | | 3 |
| GE T/RS | T/RS 121 | Theology I | 3 | |
| GE C/IL | C/IL 104 | Computing and Information Literacy | | 3 |
| GE QUAN | MATH[1] | Math Option-2 Courses | 3-4 | 3-4 |
| GE HUMN | HUMN ELECT[2] | Humanities Elective | 3 | |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **16-17** | **16-17** |
| | | **SECOND YEAR** | | |
| BUS CORE | ACC 253-254 | Financial-Managerial Accounting | 3 | 3 |
| BUS CORE | STAT 251-252 | Statistics for Business I-II | 3 | 3 |
| BUS CORE | MGT 251 | Legal Environment of Business | 3 | |
| GE PHIL-T/RS | PHIL 210-T/RS 122 | Ethics-Theology II | 3 | 3 |
| GE NSCI | NSCI ELECT | Natural Science Electives | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE ELECT | ELECT[3] | Free Elective | | 3 |
| | | | **18** | **18** |
| | | **THIRD YEAR** | | |
| MAJOR | MGT ELECT[4] | Mgt. Elective | | 3 |
| MAJOR | MGT ELECT[4] | Mgt. Elective | | 3 |
| BUS CORE | MGT 351-352 | Principles of Management I-II | 3 | 3 |
| BUS CORE | MKT 351-FIN 351 | Intro. to Marketing-Intro. to Finance | 3 | 3 |
| BUS CORE | OIM 351-OIM 352 | Intro. to Mgt. Science-Intro to Oper Mgt. | 3 | 3 |
| BUS CORE | ECO 351/IB 351 | Environment of Intl. Business | 3 | |
| GE PHIL or T/RS | PHIL or T/RS | Elective | 3 | |
| | | | **15** | **15** |
| | | **FOURTH YEAR** | | |
| MAJOR | MGT ELECT[4] | Mgt. Electives | 3 | 3 |
| MAJOR | MGT ELECT | Mgt. Electives | 3 | 3 |
| BUS CORE | MGT 455 | Business Policy & Strategy | 3 | |
| BUS CORE | OIM 471 | Business Information Management | | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | |
| GE ELECT | ELECT | Free Electives | 3 | 6 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **16** | **16** |
| | | | **Total: 130-132 CREDITS** | |

[1] See note on Math Options on page 220.

[2] If EDUC 113 is required in the first semester, it is taken in place of a humanities elective and is counted as a GE free elective. One GE free elective in the fourth year must then be taken as a humanities elective.

[3] If a third math course is required, it replaces this GE elective.

[4] In consultation with their advisor, management majors should choose two of the following four focus courses; MGT 361, 362, 460 or 461. MGT 361 and 362 focus more on people skills; MGT 460 and 461 focus more on organizational and administrative processes.

**MGT 161** Staff
**Intro to Business** 3 credits
Nature, types, and principles of business. Factors to consider in starting or choosing a business organization. Overview of business functions – finance, marketing, production, accounting, and management—in an analytical framework. Attention to business environment: legal, governmental, social and ethical. Enrollment is restricted to Associate Business Degree students. Non-Business students may take this course as a free elective with the permission of the dean of Dexter Hanley College.

**MGT 210** Dr. Cann, Dr. Sebastianelli
**Business and the Environment** 3 credits This is an interdisciplinary course designed to integrate management, marketing and operations management. This course will emphasize why environmental issues have become so central to corporate strategy and what approaches businesses can and are taking to effectively respond to environmental issues. It is designed for students from various disciplines (science, humanities, social sciences, business, education, etc.) to learn from each other without having had courses in business. It was developed for the Environmental Studies Concentration. Business majors may only use this course to fulfill a free elective.

**MGT 251** Prof. Wormuth
**Legal Environment of Business** 3 credits
The nature, sources, formation, and applications of law. The judicial function, the court system, litigation and other methods of resolving disputes, legislation-law from judicial decisions, law by administrative agencies, regulation of business activity, antitrust law, consumer protection, environment, and pollution control. Substantive review of tort, criminal and insurance law. Full review of property rights for both personal and real property. Attention to business organization, principal of agency, partnership and corporation.

**MGT 351** Staff
**Principles of Management I** 3 credits
(Prerequisite: junior standing) Survey course examines key aspects of organizations and their management, e.g., dynamic environments and their effects, organization design and structure, roles/functions of managers, managing technology and change, global management, and alternative types of organizations. This course examines the expanding role of the manager from the traditional areas of planning, organizing, controlling and directing to addressing current topics including issues of workplace diversity. Course will address the knowledge and skills that managers must develop in working with others who are different from themselves.

**MGT 352** Staff
**Principles of Management II** 3 credits
(Prerequisite: MGT 351) Survey course examines the individual in the work setting, working with a variety of people inside and outside the organization. This course deals with such issues as motivation, leadership, communication diversity at the work place, and with individual effectiveness, interpersonal relations, and group skills.

**MGT 361** Dr. Biberman, Staff
**Human Resource Management** 3 credits
(Prerequisite: MGT 351) This course will describe and explain the preparation of job descriptions, demographics of labor resources, recruitment policies, interviewing techniques, hiring contracts, aptitude testing and performance evaluation, labor turnover and labor mobility, employee morale, complaints and grievances, disciplinary procedures, employee health and safety, wage and hour administration, and government regulations relating to labor. The handling of absenteeism, alcoholism, drug addiction, and other functional duties of a human resource department will also be covered.

**MGT 362** Dr. Goll, Staff
**Employee-Management Relations** 3 credits
(Prerequisite: MGT 351) This course will focus on employee-management practices in contemporary society. It examines the employee participation in unions and their spill-over effect on nonunion settings. Course topics include unions, the collective-bargaining process, wages and benefits, seniority, grievance procedures, and arbitration. Discrimination in employment and equal employment opportunity will be discussed, as well as future issues in union and nonunion settings and international employee-management relations.

**MGT 455** Drs. Brumagim, Goll, Tischler
**Business Policy and Strategy** 3 credits
(Prerequisites: Seniors only; FIN 351, OIM 352, MGT 352, MKT 351) This is the capstone course for all Business majors. Concepts and skills developed in the prerequisite courses are integrated and applied to the overall management of an organization. Topics will include setting objectives, designing strategic plans, allocating resources, organizational structuring and controlling performance.

**MGT 460** Dr. Goll, Staff
**Organization Theory** 3 credits
(Prerequisites: MGT 351) Study of the forces both within and outside the organization that determine the structure and processes of an organization. Topics to be covered will include technology and size-influences, conflict, boundary roles, matrix structure, political factors, and sociotechnical systems.

**MGT 461** Dr. Tischler
**Management of Administrative Processes and Change** 3 credits
(Prerequisite: MGT 351) This course examines the process of administration from an open-systems framework. The effects of change (particularly technological and environmental change) on administrative systems life-cycles are discussed. This course also investigates the effect of total quality management on administrative systems. Particular attention will be given to the managing processes across administrative subsystems. Topics will include: open-systems theory, administrative-systems design, total quality management, administrative transactions analysis and management, administrative control of change processes.

**MGT 462** Dr. Brumagim, Staff
**Project Management in Organizations** 3 credits
(Prerequisites: MGT 351) This course will examine advanced project management concepts from all phases of the project lifecycle (from requirements-specification through post-project assessment). Special emphasis will be placed on understanding projects within the context of complex organizational settings by utilizing an open-systems perspective. Linkages with more permanent administration structures within the organization will be reviewed. Finally, the effect of current management trends (such as total quality management) on project management will be discussed.

**MGT 471** Drs. Biberman, McKeage
**Group Dynamics** 3 credits
(Prerequisite: MGT 351 or permission of instructor) Survey and analysis of constructs, research and applications of small group phenomena in an organizational context. Examines the various theories, research measurements and observational methods used in studying groups. Students will be able to explore their own behavior in groups by participating in various groups and/or by observing others in group experiences. The course will prepare students to be effective in groups.

**MGT 472** Staff
**Women and Men in Management** 3 credits

(Prerequisite: MGT 351) This course explores the opportunities for women in management as well as the special skills and insights needed by women in order to take full advantage of such opportunities. It will focus on the effects of having men and women acting as colleagues in the workplace and discuss the problems which may ensue. The course will prepare both men and women for the gender issues which can affect managerial performance. Topics to be covered include sexual harassment, the dual-career family and male/female socialization.

**MGT 473** Staff
**Organizational Social Responsibility** 3 credits

(Prerequisite: MGT 351 or permission of the instructor) This course is designed to introduce students to basic concepts which underlie the social responsibility aspect of the management process. The role of pluralism is examined in the societal system to provide an understanding of the evolving relationship between organizations and society as a whole. The essential nature of the managerial approach is explored in the light of the increasing importance of societal impact on the organization.

**MGT 474** Dr. Biberman
**(D)Managing a Multicultural Workforce** 3 credits

This course addresses the skills and knowledge managers must develop in dealing with the opportunities and challenges of an increasingly culturally diverse workforce. Specific topics to be covered include diversity in ethnicity, nationality, religion, culture, gender, age, sexual orientation and disability. The course will help students understand the social and other processes experienced by people in the work force as they interact and work with people different from themselves. It will also help students understand their own cultural values, biases and behaviors.

**MGT /IB 475** Dr. Chowdhury, Staff
**International Management** 3 credits

(Prerequisites: ECO 351, MGT 351) Designed as an advanced-level undergraduate course in international business. Focuses on functional strategies of multinational corporations (MNCs), structure- and control-systems of MNCs, and comparative management. The specific MNC strategies to be covered include entry, sourcing, marketing, finance, human resources and public affairs. The study of structure and control systems delves into issues such as corporate structure, headquarters-subsidiary relationships. Study of comparative management systems focuses on nature of management systems and practices in different cultures. Projected as a mainly case-oriented course.

# MARKETING

*DR. GERALD BIBERMAN, Chairperson*

Marketing is "people-oriented," focusing on the interaction between the firm and its market (buyers). The marketer explores major needs to develop new products and to position them so that buyers see their relevance. Marketing majors are introduced not only to the visible marketing tools: products, salespeople, and the various selling and promotional techniques, but also to less visible marketing functions: marketing research and the firm's interactions with wholesalers and retailers. The student will develop both the quantitative and qualitative skills needed to succeed in a real business environment.

**MARKETING**

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **SPRING** |
| GE S/BH | ECO 153-154 | Prin. of Micro-Macro Economics | 3 | 3 |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 3 | 3 |
| GE PHIL | PHIL 120 | Introduction to Philosophy | | 3 |
| GE T/RS | T/RS 121 | Theology | 3 | |
| GE C/IL | C/IL 104 | Computing and Information Literacy | | 3 |
| GE QUAN | MATH[1] | Math Option-2 courses | 3-4 | 3-4 |
| GE HUMN | HUMN ELECT[2] | Humanities Elective | 3 | |
| GE FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **16-17** | **16-17** |
| | | **SECOND YEAR** | | |
| BUS CORE | ACC 253-254 | Financial-Managerial Accounting | 3 | 3 |
| BUS CORE | STAT 251-252 | Statistics for Business I-II | 3 | 3 |
| BUS CORE | MGT 251 | Legal Environment of Business | 3 | |
| GE PHIL | PHIL 210 | Ethics | 3 | |
| GE T/RS | T/RS 122 | Theology II | | 3 |
| GE NSCI | NSCI ELECT | Natural-Science Electives | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE ELECT | ELECT[3] | Free Elective | | 3 |
| | | | **18** | **18** |
| | | **THIRD YEAR** | | |
| MAJOR | MKT 361 | Marketing Research | | 3 |
| MAJOR | MKT 362 | Consumer Behavior | | 3 |
| BUS CORE | MKT 351-FIN 351 | Intro. to Marketing-Intro. to Finance | 3 | 3 |
| BUS CORE | MGT 351-352 | Principles of Management I-II | 3 | 3 |
| BUS CORE | OIM 351-OIM 352 | Intro. Mgt. Science-Intro. Oper. Mgt. | 3 | 3 |
| BUS CORE | ECO/IB 351 | Environment of Intl. Business | 3 | |
| GE PHIL or T/RS | PHIL or T/RS | Elective | 3 | |
| | | | **15** | **15** |
| | | **FOURTH YEAR** | | |
| MAJOR | MKT 470-476 | Mkt. Communications-Mkt Strategy | 3 | 3 |
| MAJOR | MKT ELECT | Mkt. Electives | 3 | 3 |
| BUS CORE | MGT 455 | Business Policy & Strategy | 3 | |
| BUS CORE | OIM 471 | Business-Information Management | | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | 3 | |
| GE ELECT | ELECT | Free Electives | 3 | 6 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **16** | **16** |
| | | | **Total:** | **130-132 CREDITS** |

[1] See note on Math Options on page 220.

[2] If EDUC 113 is required in the first semester, it is taken in place of a humanities elective and is counted as a GE free elective. One GE free elective in the fourth year must then be taken as a humanities elective.

[3] If a third math course is required, it replaces this GE elective.

**MKT 351** Staff
**Introduction to Marketing** 3 credits
(Prerequisites: junior standing, ECO 153 and 154 or ECO 101) This course introduces the student to the field of marketing. An overview of the principles on which the discipline is founded is provided to students. In addition, the role that various institutions such as manufacturing firms, wholesalers and retailers, and other facilitating middlemen play in the marketplace is examined. The marketing concept is presented as the framework under which the decisions related to marketing-mix variables (product, place, price and promotion) are made by organizations.

**MKT 361** Dr. Chattopadhyay, Staff
**Marketing Research** 3 credits
(Prerequisite: MKT 351) Study of the role of marketing information as the basis for decision-making. Topics include research design, methods of gathering data, questionnaire structure, interviewing methods and preparing the final report. Examples of various types of research problems and quantitative techniques used by marketing management are presented.

**MKT 362** Staff
**Consumer Behavior** 3 credits
(Prerequisite: MKT 351) Study of theories of consumer behavior. The buyer is analyzed at the individual level in terms of motivation, attitudes, etc. and at the social level in terms of influence on buying behavior from the socio-economic environment.

**MKT 470** Dr. Zych, Staff
**Marketing Communications** 3 credits
(Prerequisite: MKT 351) Personal and mass communication approaches generated by manufacturers and intermediates or institutions toward target markets. The design of advertising campaigns to shift consumer attitudes, to secure resellers' support and to inform, persuade, and move them to action. Development of copy selection and media and measurement of promotion effectiveness including evaluation of sales force.

**MKT 471** Dr. Sumrall
**Sales Force Management** 3 credits
(Prerequisites: MGT 352, MKT 351) This course is intended to develop the concepts and techniques needed to identify and analyze the various decision areas faced by a sales force manager. Topics to be covered include recruiting, selecting and training the sales force; forecasting, budgeting and sales quotas; assigning, motivating and compensating the sales force.

**MKT 472** Dr. Sumrall
**Retailing Management** 3 credits
(Prerequisites: MGT 352, FIN 351, MGT 351, OIM 351) This course is intended to focus on the decision areas facing retail managers. Topics to be covered will include retailing, structure, merchandising, locations, store layout, promotion, pricing and personnel.

**MKT/IB 475** Dr. Chattopadhyay
**(D)International Marketing** 3 credits
(Prerequisites: MKT 351, ECO 351) Analysis of the marketing strategies of multinational corporations with emphasis on the internal environment of country markets. Discussions will include comparisons of different regional markets along socio-economic, political and cultural lines. Different types of international market barricades and the corresponding market-entry strategies will be analyzed. Additional readings from international publications will be required.

**MKT 476** Staff
**Marketing Strategy** 3 credits
(Prerequisite: MKT 351) The theme of this course is building effective marketing strategies through integrated decision-making. Emphasis is on different decision models within functional areas such as demand analysis, consumer research, product and promotion management, etc. Case discussions and advanced readings will be required.

# OPERATIONS AND INFORMATION MANAGEMENT

*DR. PRASADARAO KAKUMANU, Chairperson*

Operations and Information Management is primarily concerned with the effective management of production and operations systems in manufacturing and service organizations. Career opportunities include:

| Manufacturing | | Services | |
|---|---|---|---|
| V.P. Manufacturing | Plant Manager | V.P. Operations | Store Manager |
| Production Manager | Quality Control Manager | Operations Manager | Customer Service Manager |
| Materials Manager | Production Planning Analyst | Supplies Specialist | Warehouse Manager |
| Inventory Analyst | Purchasing Manager | Buyer or Purchasing Agent | Inventory Analyst |
| Warehouse Manager | Shipping Specialist | | |

**MINOR:** To minor in operations management, a student must take a minimum of 18 credits. Four courses are required: STAT 252, OIM 351, OIM 352 AND OIM 471 and any two of the following: OIM 361, OIM 363, OIM 364, OIM 365, OIM 470, OIM 473, OIM 476 or OIM 490.

## OPERATIONS MANAGEMENT

| | Dept. and No. | Descriptive Title of Course | Credits FALL | Credits SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| GE S/BH | ECO 153-154 | Prin. of Micro-Macro Economics | 3 | 3 |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 3 | 3 |
| GE PHIL | PHIL 120 | Introduction to Philosophy | | 3 |
| GE T/RS | T/RS 121 | Theology I | 3 | |
| GE C/IL | C/IL 104 | Computing and Information Literacy | | 3 |
| GE QUAN | MATH [1] | Math Option-2 courses | 3-4 | 3-4 |
| GE HUMN | HUMN ELECT [2] | Humanities Elective | 3 | |
| GE FSEM-PHED | INTD 100-PHED ELECT | Freshman Seminar-Physical Education | 1 | 1 |
| | | | **16-17** | **16-17** |
| | | **SECOND YEAR** | | |
| BUS CORE | ACC 253-254 | Financial-Managerial Accounting | 3 | 3 |
| BUS CORE | STAT 251-252 | Statistics for Business I-II | 3 | 3 |
| BUS CORE | MGT 251 | Legal Environment of Business | | 3 |
| GE PHIL-T/RS | PHIL 210-T/RS 122 | Ethics-Theology II | 3 | 3 |
| GE NSCI | NSCI ELECT | Natural Science Electives | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE ELECT | ELECT[3] | Free Elective | 3 | |
| | | | **18** | **18** |
| | | **THIRD YEAR** | | |
| MAJOR | OIM 361 | Productivity Management | | 3 |
| MAJOR | OIM ELECT | OIM Elective | | 3 |
| BUS CORE | MGT 351-352 | Principles of Management I-II | 3 | 3 |
| BUS CORE | MKT 351-FIN 351 | Intro. to Marketing-Intro to Finance | 3 | 3 |
| BUS CORE | OIM 351-OIM 352 | Intro. to Mgt. Science-Intro. to Oper Mgt. | 3 | 3 |
| BUS CORE | ECO/IB 351 | Environment of Intl. Business | 3 | |
| GE PHIL or T/RS | PHIL or T/RS | Elective | 3 | |
| | | | **15** | **15** |
| | | **FOURTH YEAR** | | |
| MAJOR | OIM 470 | Production Planning and Control | 3 | |
| MAJOR | OIM 473 | Bus. Appl. of Communication Networks | | 3 |
| MAJOR | OIM ELECT | OIM Electives | 3 | 3 |
| BUS CORE | MGT 455 | Business Policy & Strategy | 3 | |
| BUS CORE | OIM 471 | Business Information Management | | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | |
| GE ELECT | ELECT | Free Electives | 3 | 6 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **16** | **16** |

**Total: 130-132 CREDITS**

[1] See note on Math Options on page 220.

[2] If EDUC 113 is required in the first semester, it is taken in place of a humanities elective and is counted as a GE free elective. One GE free elective in the fourth year must then be taken as a humanities elective.

[3] If a third math course is required, it replaces this GE elective.

**STAT 251** Drs. Gnanendran, Gougeon
**(Q)Statistics for** Sebastianelli, Staff
**Business I** 3 credits
(Prerequisite: MATH 107 or 114) Detailed coverage of descriptive statistics. An introduction to the elements of probability theory (including Bayes's theorem) and decision theory, and index numbers. The major discrete and continuous probability distributions are covered with an emphasis on business applications. Data analysis will be done using appropriate software.

**STAT 252** Drs. Gnanendran, Gougeon
**(Q)Statistics for** Sebastianelli, Staff
**Business II** 3 credits
(Prerequisite: STAT 251; corequisite: C/IL 104) A survey of inferential statistical methods covering sampling distributions, interval estimation, hypothesis testing, goodness-of-fit tests, analysis of variance, regression and correlation analyses, and non-parametric statistics. Data analysis will be done using appropriate software.

**STAT 253** Drs. Gougeon, Kakumanu,
**Statistics for** Staff
**Economics** 3 credits
(Prerequisite: MATH 107 or 114) Coverage of statistical tools to analyze economic data. Topics include measures of central tendency, dispersion, probability distributions, index numbers, time series analysis, regression and correlation, and analysis of variance. Data analysis will be done using appropriate software.

**OIM 351** Drs. Chien, Cunningham,
**Introduction to** Gnanendran, Tamimi
**Management** Staff
**Science** 3 credits
(Prerequisites: junior standing, C/IL 104, STAT 251) A survey of the quantitative techniques which are used by modern managers. Topic coverage focuses on model building, linear programming methods, queuing models, project management and simulation. Emphasis is placed on the use and limits of these quantitative methods. Model analysis will be done using appropriate software.

**OIM 352** Drs. Chien, Cunningham,
**Introduction to** Gnanendran, Tamimi
**Operations** Staff
**Management** 3 credits
(Prerequisites: OIM 351, STAT 252) A functional view of how to manage the activities involved in the process of converting or transforming resources into products or services. Topics include an overview of strategic decisions, forecasting, product design, process planning, facility layout, basic inventory models, capacity planning, aggregate planning and scheduling.

**OIM 361** Drs. Cunningham, Tamimi
**Productivity** Staff
**Management** 3 credits
(Prerequisite: STAT 252, junior standing) A study of productivity and materials flow. Topics include: productivity measurement, Just-in-Time techniques, synchronizing product flow, quality control issues, layout, job design, maintenance and purchasing issues.

**OIM 363** Drs. Sebastianelli, Tamimi
**Total Quality Management** Staff
(Prerequisite: STAT 252) 3 credits
The philosophy of Total Quality Management (TQM) and issues concerning its implementation are studied, covering the approaches of well-known leaders in the field, e.g., Deming. Topics include employee empowerment, quality-improvement tools, cross-functional teams, leadership for quality, statistical process control, process capability, Taguchi methods, ISO 9000 standards, and the role of inspection in TQM.

**OIM 364** Drs. Cunningham, Prattipati
**Service Operations** Staff
**Management** 3 credits
(Prerequisite: STAT 252) Principles of operations management applied to service organizations. Topics include: service-system design; location and layout of services; planning, scheduling and control of services; service measurement and quality assurance; management information systems in services; and not-for-profit businesses.

**OIM 365** Dr. Cunningham, Staff
**Logistics Management** 3 credits
(Prerequisite: OIM 352) The design, operation and control of logistics systems for production and service firms. Topics include activities associated with the physical-supply and physical-distribution efforts of the firm, such as facility location, logistics customer service, order processing systems, mode and carrier selection, warehousing, and logistics requirements planning.

**OIM 470** Drs. Chien, Gnanendran, Staff
**Production Planning and Control** 3 credits
(Prerequisite: OIM 352) This course is concerned with the study of production planning and control activities in an enterprise resource planning context. Topics include aggregate planning, capacity planning, master production scheduling, material requirements planning, production activity control, purchasing, inventory models, and Just-in-Time systems. A particular focus of this course will be the interactions between operations and the other functional areas of the business.

**OIM 471** Drs. Kakumanu, Prattipati, Tamimi, Staff
**Business Information Management** 3 credits
(Prerequisites: C/IL 104, MGT 351) Computers and how they can be applied to the operations and management of business firms. Topics include data-processing concepts, overviews of computer hardware and software, modern data- and information-processing systems, applications of computers in business, acquiring and managing of computer and information resources. Software packages will be used to gain hands-on experience.

**OIM 473** Drs. Kakumanu, Prattipati, Staff
**Business Applications of Communication Networks** 3 credits
(Prerequisite: OIM 471) Use of computer and telecommunication networks to achieve organizational goals. Topics include data communications; planning and design of communication networks; data integrity, independence and security; client-server computing; global communication; the internet; applications of telecommunication networks and current issues and future trends.

**OIM 476** Drs. Tamimi, Prattipati, Staff
**Technology Management** 3 credits
(Prerequisite: OIM 352) This course covers contemporary topics in technology including: role of technology in organization; choice of process technology; policy and strategy; technology positioning; automation and service sectors; information technologies in manufacturing; moving beyond Taylorism and other issues in technology management for the 90's.

# The Panuska College of Professional Studies

The Panuska College of Professional Studies (CPS) prepares students in a wide range of professions, principally in allied health and education. The College has been designed with the conviction that all disciplines should be taught and understood through a balance of theory and practice. An exclusively theoretical understanding of a discipline is incomplete. Practice for which there is no understood context is of limited value. It is this belief that structures the College's pedagogy and curriculum. CPS students receive exemplary preparation for the profession of their choice, and a solid education in the liberal arts and sciences. In addition, students perform community service annually as a requirement for graduation. In this way, the service aspects of their prospective careers can be understood in personal and comprehensible terms. Such an ethic has roots in antiquity, is Catholic and Jesuit in tradition and spirit, and responsive to contemporary needs. All of the College's programs are accredited by the appropriate professional organizations.

# COUNSELING AND HUMAN SERVICES

*DR. OLIVER J. MORGAN, Chairperson*
*DR. ANN MARIE TOLOCZKO, Director of Human Services*

The Human Services curriculum is designed to develop in students the values, knowledge and skills necessary to work with people in a variety of settings and situations. The sequence of courses focuses on understanding normal and abnormal human adjustment across the lifespan and on developing skill in interventions designed to maximize human adjustment and development. Core requirements in the major emphasize values, knowledge and skills common to all fields of human services, while electives allow students to develop competence in assisting specific populations. A three-credit, 138-hour internship experience is required of all majors, with a second, three-credit internship available as an elective.

Students must maintain a minimum grade of C in all major courses and cognate courses, and full-time students must complete a minimum of ten hours of community service during each fall and spring semester registered as a Human Services major. Dexter Hanley College students will meet the service-learning requirement by completing major courses that have a service-learning component. They will not be required to complete additional service-learning hours.

The curriculum is geared toward students who have high social-science interests as well as general scientific interest and aptitude in the social and behavioral sciences. The curriculum prepares students for entry-level positions in a variety of human-services positions in private or public settings, or for graduate study in counseling, social work, or related social or behavioral science professions.

Recent graduates have pursued Master's degrees in social work, community, rehabilitation or school counseling, occupational therapy, art therapy, human resources administration, audiology and law. They have attended the University of Pennsylvania, Fordham University, New York University, Rutgers, Hunter College, Adlephi University and the University of Maryland.

Concentration in Rehabilitation Services: The Human Services Program has expanded to offer a concentration in rehabilitation services to enhance the knowledge and practice for work with persons with disabilities in response to in increasing need for baccalaureate level professionals in rehabilitation services. Through a concentration in rehabilitation services, students will be prepared to work in state and local agencies which are responsible for the vocational, mental-health, job-development and coaching, and related needs of persons with disabilities. Included in this concentration can be an emphasis on persons with addiction and substance-abuse disabilities. This concentration is for Human Services majors only.

Combined Baccalaureate/Master's Program: outstanding Human Services majors are eligible for consideration in this program (please refer to the catalog sections on Special Programs or The Graduate School and to the Graduate School Catalog for specifics of the program). Community Counseling, Rehabilitation Counseling and School Counseling are graduate programs available for students of high academic quality and clear professional goals. Each graduate program is nationally accredited and the department of Counseling and Human Services is recognized regionally and nationally in Counselor Education. Three faculty received the Outstanding Counselor Educator Award for the state of Pennsylvania.

**MINOR.** A minor in Human Services requires HS 111, 112, 241, 242, 341, and one HS elective course.

# HUMAN SERVICES

| | Dept. & No. | Descriptive Title | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **SPRING** |
| MAJOR | HS 111 | Intro. to Human Adjustment | 3 | |
| MAJOR | HS 112 | *Human Service Systems | | 3 |
| COGNATE(GE S/BH) | PSYC 110 | Fundamentals of Psychology | | 3 |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | 3 | |
| GE PHIL-T/RS | PHIL 120-T/RS 121 | Intro Philosophy-Theology I | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE FSEM | INTD 100 | *Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Elective | | 1 |
| | | | **16** | **16** |
| | | **SECOND YEAR** | | |
| MAJOR | HS 241 | *Case Mgt. and Interviewing | 3 | |
| MAJOR | HS 242 | *Counseling Theories | | 3 |
| MAJOR | HS 293 | Research Methods | | 3 |
| COGNATE(GE S/BH) | PSYC 221 | Childhood and Adolescence | 3 | |
| COGNATE | PSYC 222 | Adulthood and Aging | | 3 |
| GE QUAN | QUAN | Elective | 3 | |
| GE PHIL-T/RS | PHIL 210-T/RS122 | Ethics-Theology II | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE NSCI | NSCI ELECT | Natural-Science Electives | 3 | 3 |
| | | | **18** | **18** |
| | | **THIRD YEAR** | | |
| MAJOR | HS 333 | *Multiculturalism in H.S. | 3 | |
| MAJOR | HS 340 | Career Seminar | I | |
| MAJOR | HS 341 | *Group Counseling | 3 | |
| MAJOR | HS 380 | Internship | | 3 |
| MAJOR | HS ELECT | Human Services Electives | 6 | 6 |
| COGNATE | ELECT2 | Social/Behav Sci. Electives | 3 | 3 |
| GE PHIL-T/RS | PHIL-T/RS ELECT | Philosophy-T/RS Elective | | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **17** | **16** |
| | | **FOURTH YEAR** | | |
| MAJOR | HS 441 | *Crisis Intervention | 3 | |
| MAJOR | HS ELECT | Human Services Electives | | 3 |
| COGNATE | ELECT | Social/Behav Sci Electives | 6 | 6 |
| GE ELECT | ELECT | Free Electives | 6 | 6 |
| | | | **15** | **15** |
| | | | **Total: 131 CREDITS** | |

*Service-learning course

To avoid duplication of course content, Human Services majors should not take PSYC 225 (Abnormal Psychology), PSYC 224 (Personality), PSYC 330 (Research Methods), or PSYC 360 (Clinical Psychology). Students who wish to declare a double major or a minor in Psychology should consult their advisor.

# HUMAN SERVICES CONCENTRATION IN REHABILITATION SERVICES

| | Dept. & No. | Descriptive Title | Credits FALL | SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| MAJOR | HS 111 | Intro. to Human Adjustment | 3 | |
| MAJOR | HS 112 | *Human Service Systems | | 3 |
| COGNATE(GE S/BH) | PSYC 110 | Fundamentals of Psychology | | 3 |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | 3 | |
| GE PHIL-T/RS | PHIL 120-T/RS 121 | Intro Philosophy-Theology I | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE FSEM | INTD 100 | *Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Elective | | 1 |
| | | | **16** | **16** |
| | | **SECOND YEAR** | | |
| MAJOR | HS 241 | *Case Mgt. and Interviewing | 3 | |
| MAJOR | HS 242 | *Counseling Theories | | 3 |
| MAJOR | HS 293 | Research Methods | | 3 |
| COGNATE(GE S/BH) | PSYC 221 | Childhood and Adolescence | 3 | |
| COGNATE | PSYC 222 | Adulthood and Aging | | 3 |
| GE QUAN | QUAN | Elective | 3 | |
| GE PHIL-T/RS | PHIL 210-T/RS122 | Ethics-Theology II | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE NSCI | NSCI ELECT | Natural-Science Electives | 3 | 3 |
| | | | **18** | **18** |
| | | **THIRD YEAR** | | |
| MAJOR | HS 333 | *Multiculturalism in H.S. | 3 | |
| MAJOR | HS 340 | Career Seminar | 1 | |
| MAJOR | HS 341 | *Group Counseling | 3 | |
| MAJOR | HS 342 | Foundations of Rehabilitation | 3 | |
| MAJOR | HS 343 | Med. & Psychosoc. Aspects of Disability | | 3 |
| MAJOR | HS 344 | Vocational Education | | 3 |
| MAJOR | HS ELECT | Electives | 3 | 6 |
| COGNATE | ELECT | Social/Behavioral Science Elective | 3 | |
| GE ELECT | ELECT | Free Elective | | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **17** | **16** |
| | | **FOURTH YEAR** | | |
| MAJOR | HS 440 | Job Development | 3 | |
| MAJOR | HS 441 | *Crisis Intervention | 3 | |
| MAJOR | HS 480 | Internship in Rehabilitation Services | | 3 |
| MAJOR | HS ELECT | Elective | 3 | 3 |
| MAJOR | HS ELECT | Human Services Electives | 3 | 3 |
| COGNATE | ELECT | Social/Behav Sci Electives | 3 | 3 |
| GE ELECT | ELECT | Free Electives | | 3 |
| | | | **15** | **15** |
| | | | **Total:** | **131 CREDITS** |

* Service-learning course.

To avoid duplication of course content, Human Services majors should not take PSYC 225 (Abnormal Psychology), PSYC 224 (Personality Theories), PSYC 330 (Research Methods), or PSYC 360 (Clinical Psychology).

**HS 001** Staff
**Residence Life: Theory and Practice** 0 credits
Introduction to Resident Assistant position on the University of Scranton residence-life staff. Communication skills, conflict resolution, crisis intervention and referral, development of community in a residence facility, and the personal development of RAs as staff members will be stressed. Enrollment limited to resident assistants. Not recommended for academic credit.

**HS 111** Staff
**(S)Introduction to Human Adjustment** 3 credits
Introduction to human adjustment throughout the lifespan. Focuses on discrimination of normal and abnormal behavioral and emotional responses to developmental life stages and to common developmental concerns.

**HS 112** Staff
**Human-Services Systems** 3 credits
Examines the human-services systems and institutions which have evolved as a response to human need. Explores both the effect of social problems on individuals and families and the service systems designed to alleviate such problems.

**HS 241** Staff
***(D)Case Management and Interviewing** 3 credits
The role of the human-service professional as a case manager or coordinator of services is examined. Initial interviewing skills and techniques are discussed with an emphasis on case conceptualization, problem identification, goal selection, evaluation, and follow-up.

**HS 242** Staff
***Counseling Theories** 3 credits The role of the human-services professional as an individual counselor or caseworker is examined. Theories and techniques as well as problems in individual counseling are explored.

**HS 284** Staff
**Special Topics** 3 credits
Courses developed to provide in-depth coverage of specific topics in human services. Course title will be provided in advance of registration. May be used only twice to satisfy major or minor elective requirement.

**HS 293** Staff
**(W)Research Methods in Human Services** 3 credits
An introduction to research methodology as applied to problems in human-services agencies and settings. Specific topics include descriptive, experimental, and quasi-experimental research methods. Emphasis is placed on development of the student's ability to be a critical consumer of research in human services.

**HS 321** Staff
**Physical Disabilities** 3 credits
Selected physical conditions and/or disabling conditions are examined with particular emphasis on body systems involved, treatment possibilities, residual function limitations, and psychological impact of each condition.

**HS 322** Staff
**Cognitive Disabilities** 3 credits
Etiology, assessment, diagnosis, treatment, and prevention of cognitive disabilities are presented. This course examines both student and societal beliefs concerning persons with cognitive disabilites. The implications of living with cognitive disabilities will be explored and the impact of disability culture as a means to facilitate the empowerment of children and adults with cognitive disabilities will be presented.

**HS 323** Staff
**Psychiatric Rehabilitation** 3 credits
An examination of the problems associated with mental and emotional disturbances. Emphasis is placed on contemporary modalities of rehabilitation as they relate to community mental-health programs, and innovative non-medical treatment approaches. Critical issues in mental health will be discussed.

**HS 331** Staff
**Health and Behavior** 3 credits
Focuses on stress which affects thoughts, emotions, and the body. Stress diseases of adaption include cancer, Type A Behavior, GI tract disorders along with stress-related thought disorders and emotional disturbances. Students learn to apply relaxation, cognitive restructuring and record-keeping in the treatment of their own as well as others' health.

**HS 332** Staff
**Career Development** 3 credits
Explores theories of career choice and adjustment. Emphasis will be placed upon methods and resources for facilitating career development throughout the lifespan. Career education, computerized information systems, and decision-making methods will be considered along with innovative approaches for placement of special-needs populations.

**HS 333** Staff
***(D)Multiculturalism in Human Services** 3 credits
Focuses on current social and cultural issues in human services and related fields. Human development in a multicultural society will be examined and the basic objectives and dimensions of multicultural intervention will be defined. Student self-awareness of values, attitudes and beliefs will be emphasized.

**HS 334** Staff
**Marital and Family Counseling** 3 credits
Theories of family counseling will be presented with specific attention to the structural and strategic approaches. A variety of family counseling techniques and stages will be learned through the use of role play and videotaping. The utilization of family counseling will be discussed. (Also listed as HD 234.)

**HS 335** Staff
**Administration in Human Services** 3 credits
Focuses on the development of skills and knowledge related to program and organizational development, and community-wide planning in human services. Topics include organizational theory applied to human service settings, consultation, supervision, planning, funding and training.

**HS 336** Staff
**Recreational Therapy** 3 credits
Designed to develop an understanding of purpose, organization, administration and delivery of recreational therapy services for the handicapped.

**HS 337** Staff
**Counseling Girls and Women** 3 credits
This course is designed to explore the topic of counseling girls and women in an sociocultural, historical, and multicultural context. Through the examination of the history of women, contemporary theories of girl's and women's psychological development [ e.g. social construction of gender, identity] from a self-in-relation foundation, and feminist counseling and psychotherapy and its role in de-pathologizing the importance of relationships to girls and women.

**HS 340** Staff
**Career Seminar** 1 credit
(Majors only; prerequisite for HS 380) Designed to introduce the student in the Human Services curriculum to counseling, human development and human-services occupations. Short- and long-term goals are examined in preparation for employment or further study.

**HS 341** Staff
***Group Dynamics** 3 credits
A basic understanding of group dynamics and individual behavior in groups is presented. Methods of developing and organizing group programs are stressed. Students participate in a group experience.

**HS 342** Staff
**Foundations of Rehabilitation** 3 credits
Students will develop sensitivity, appreciation and understanding of what it means to have a disability. Topics covered will include federal, state and community mandates for the rehabilitation of persons with disabilities, independent living concepts, and the basic principles of rehabilitation. A comprehensive review will occur on the variety of rehabilitation programs across the public, private non-profit and private for-profit settings. Ethical decision-making will be integrated in the course and students will learn to practice with cultural sensitivity. Site visits to rehabilitation agencies and applied experiences will be provided.

**HS 343** Staff
**Medical and Psychosocial Aspects of Disabilities** 3 credits
Students will acquire knowledge and understanding of the medical, functional and psychosocial aspects of a wide array of disabilities. The emphasis will be holistic and person-centered. Curriculum components include learning medical terminology, the use of medical information, identification and discussion of psychosocial aspects of disability, and the impact, identification and resolution of attitudinal and environmental barriers. Students will have the opportunity to interact with persons with disabilities.

**HS 344** Staff
**Vocational Evaluation** 3 credits
This course focuses on the theme of assessment and employment of individuals with disabilities. Students will discover the impact of the Rehabilitation Act Amendments of 1998 and the ADA on employment concerns of persons with disabilities. Students will compile and utilize assessment information such as prior records, test results, work samples and situational assessment.

**HS 380** Staff
**Internship in Human Services** 3 credits
(Prerequisite: HS 340) The internship is a significant clinical and educational experience that ends the third year of academic experience and involves a supervised practical experience in a community agency providing human services. It provides both a practical experience in the student's field and an opportunity to integrate knowledge from a variety of courses into a working professional philosophy. Students will spend a minimum of 120 hours in the field placement and a minimum of 18 hours in on-campus staffing sessions. A semester project is required. Offered only during the spring semester; prerequisite for HS 481. Graded Satisfactory (S) or Unsatisfactory (U).

**HS 421** Staff
**Addictions** 3 credits
Physical, social and psychological aspects of addiction: biochemical, nutritional, psychodynamic, and behavioral approaches to assessment, treatment, and prevention of addiction. Emphasis is on drug abuse and alcoholism.

**HS 422** Staff
**Substance-Abuse Education** 3 credits
Design, implementation, and evaluation of substance-abuse education and prevention programs.

**HS 423** Staff
**Legal and Health Aspects of Substance Abuse** 3 credits
Legal and health consequences of substance abuse are examined. Special attention is given to the role of the substance-abuse specialist in relationship to health care and legal systems.

**HS 440** Staff
**Job Development** 3 credits
An awareness of the changing world of work will be the backdrop for job analysis, labor market surveys, vocational adjustment, job development and job placement will be addressed. Students will be exposed to both traditional and current models of employment for individuals with disabilities. Coordination of services with collaborating agencies (e.g., social, education, financial, vocational, legal, transportation and housing) will be included. Rehabilitation technology and adapted computer applications will be emphasized.

**HS 441** Staff
***Crisis Intervention** 3 credits
Theory and practice of crisis intervention as applied to common crisis situations such as suicide, battering, violent behavior, post-traumatic stress disorder, substance abuse, sexual assault, and personal loss.

**HS 480** Staff
**Internship in Rehabilitation Services** 3 credits
(Prerequisite HS 340). The internship is specifically designed for students in the Rehabilitation Services concentration. It is a significant clinical and educational experience that ends the fourth year of academic experience. Students will spend a minimum of 150 hours in their field placement and a minimum of 18 hours in on-campus staffing/supervision sessions. The internship provides a practical experience in the rehabilitation field and an opportunity to integrate course knowledge into a working professional philosophy. A semester project may be required. The internship will be offered in the spring semester of the student's fourth year. HS 80 is graded Satisfactory (S) or Unsatisfactory (U).

**HS 481** Staff
**Internship in Human Services** 3 credits
(Prerequisite: HS 380) This second internship in Human Services involves 150 hours in a community agency or organization providing human services. It allows the student to follow-up on the experiences obtained during the first internship or to explore a different type of organization or experience within an organization. There is no on-campus staffing requirement. A semester project may be required. This internship may be taken during any regular academic semester including intersession and summer and may be completed outside of the immediate University region. Approval by program director is required. Graded Satisfactory (S) or Unsatisfactory (U).

# EDUCATION

*DR. DAVID A. WILEY, Chairperson*
*DR. KATHLEEN K. MONTGOMERY, Director, Basic Certification Programs*

The Department of Education endeavors to contribute to the improvement of education by preparing informed, inquiring, and skilled professionals who, as scholars and decision-makers, are prepared for positions in the educational community. More specifically, the department aims to provide persons with a breadth and depth of knowledge and understanding in their specialized areas of professional practice and to provide training to ensure competence in the specific area of functioning. To this end, individual program competencies have been developed. Additionally the Department endeavors to offer opportunities for continued professional growth to practicing educators, to assist in the educational growth and development of the community served by the University, and to foster the advancement of knowledge through research in education.

The Department of Education offers degrees in Early Childhood, Elementary and Special Education, each leading to certification. Secondary Education concentrations lead to certification in:

| | | | |
|---|---|---|---|
| Biology | English | German | Physics |
| Chemistry | French | Latin | Social Studies |
| Communication | General Science | Mathematics | Spanish |

Elementary Education leads to state certification (Pennsylvania, K-6) and Early Childhood Education (pre-K-3).

The department's programs are accredited by the Pennsylvania Department of Education. The University's Professional Education Unit is also accredited by the National Council for Accreditation of Teacher Education. Accreditation and interstate agreements between Pennsylvania and selected states assure that courses taken will be considered for certification in most states. Competency tests are required for Pennsylvania Teacher Certification.

A student may enter the Secondary Education program either as a major in education or as a major in an academic department with a second major in the Education Department. However, in both cases the student must be approved by the department and follow the prescribed courses if he/she desires certification. Registration into Education Department courses numbered 230 and above are limited to majors or second majors in the programs of the Education Department. Exceptions require the expressed permission of the assistant dean and chair of the department. All aspects of the state-approved program must be completed to ensure recommendation for certification.

Double majors, including both a subject area and Education, may be arranged in the case of exceptional students. These must be approved by both departments involved and by the college dean. A specific program will be designed in each individual case. Double-certification programs may also be arranged with the approval of the appropriate program directors.

Education majors are evaluated regularly at a meeting of the Education Department faculty to assess each individual student's continuing potential to become a teacher. This determination is based on academic and personal qualities consistent with the competencies stated in *The Education Student Handbook* (available from the Education Department and in the Weinberg Memorial Library). The academic standard of the Education Department is a 2.5 cumulative grade-point average (GPA) in Education classes, in teaching-area and cognate courses, and overall. Additionally, a grade of "C" or better is required in all major and teaching-area courses to student-teach and to elicit a recommendation for certification. Students whose professional development is unsatisfactory are subject to departmental probation and may be recommended to the dean of the college for dismissal from the Education program. The department's probation policy and other information are presented in *The Education Student Handbook*. All Education majors are required to perform 10 hours of community service per academic year. The service hours for freshman, sophomore and junior Education majors are normally performed in a semester opposite the required field experience of that academic year. The service hours for senior education majors are performed as part of the students' professional development during their senior student-teaching experience. Secondary Education majors perform 20 hours of service in their freshman year and have no service requirement for their sophomore year. For the academic year 2000-2001, the service-linked courses are marked with an * in both the individual program grids and in the course descriptions.

Additionally, as a matter of University policy, all Education majors are required to submit a completed Act 34 clearance (and, in some cases, the Pennsylvania Child Abuse History Clearance) to the Education Department prior to being placed at any field experience site that would put them in direct contact with children. This clearance is collected by the University on behalf of the school entity wherein the field experience will occur. Completed clearances should be submitted with field experience information forms required by the Director of Field Placement. In no case will a student be provided with placement information previous to the director's receipt of the completed forms. The completed Act 34 form will be delivered to the school entity by the Education Department after the clearance form is obtained by the student. The University will not maintain a student's Act 34 clearance form or background check after delivery of the clearance form to the school entity wherein the field experience will occur.

# EARLY CHILDHOOD EDUCATION

| | Dept. and No. | Descriptive Title of Course | Credits FALL | | Credits SPRING |
|---|---|---|---|---|---|
| | | **FIRST YEAR**[3] | | | |
| MAJOR | EDUC 121 | Foundations of Education | | | 3 |
| MAJOR | EDUC 180 | Field Experience I | 1 | or | 1 |
| MAJOR | EDUC 140 | *Early Childhood Education | 3 | | |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 3 | | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | | | 3 |
| GE QUAN | MATH 104 | Math/Elementary Teaching | 3 | | |
| GE PHIL | PHIL 120 | Introduction to Philosophy | | | 3 |
| GE T/RS | T/RS 121 | Theology I | | | 3 |
| GE NSCI | PHYS 102 | Earth Science | 3 | | |
| GE S/BH | PSYC 110 | Fund. of Psychology | 3 | | |
| FSEM | INTD 100 | Freshman Seminar | 1 | | |
| GE PHED | PHED ELECT | Physical Education | | | 1 |
| | | | **16-17** | | **16-17** |
| | | **SECOND YEAR**[3] | | | |
| MAJOR | EDUC 222 | Educational Psychology | 3 | | |
| MAJOR | EDUC 251 | Development of Early Learner | 3 | | |
| MAJOR | EDUC 252 | Assessment in ECE | | | 3 |
| MAJOR | EDUC 241 | *Foundations of Reading | | | 3 |
| MAJOR | EDUC 280 | Field Experience II | 1 | | |
| COGNATE | BIOL 100 | Concepts of Biology | 4 | | |
| COGNATE | ENGL 130 | Children's Literature | | | 3 |
| GE PHIL | PHIL 210 | Ethics | 3 | | |
| GE T/RS | T/RS 122 | Theology II | 3 | | |
| GE HUMN | HUMN | Literature Elective | | | 3 |
| GE ELECT | PS 135 | State and Local Government | | | 3 |
| GE S/BH | PSYC 221 | Childhood & Adolescence | | | 3 |
| GE PHED | PHED ELECT[5] | Physical Education | 1 | | |
| | | | **18** | | **18** |
| | | **THIRD YEAR**[3] | | | |
| MAJOR | EDUC 380 | Field Experience III | 1 | | |
| COGNATE | NURS 100 | Family Health | | | 3 |
| COGNATE | EDUC 352 | Math/Science/Health Methods | 3 | | |
| COGNATE | EDUC 341 | Education of Exceptional Child | 3 | | |
| COGNATE | NSCI 201 | Science in Human Environment | | | 3 |
| COGNATE | EDUC 342 | Educ. Media/Technology | | | 3 |
| COGNATE | EDUC 343 | Eval. & Measurement | | | 3 |
| COGNATE | EDUC 351 | *ECE Methods Across Curric. | | | 3 |
| GE ELECT | GEOG 134 | World Reg. Geography | 3 | | |
| GE NSCI | CHEM 100 | Elements of Chemistry | 3 | | |
| GE HUMN | ARMU 140-141 | Perceiving the Arts | 3 | | 3 |
| GE PHED | PHED | Physical Education | 1 | | |
| | | | **17** | | **18** |
| | | **FOURTH YEAR**[3,5] | | | |
| MAJOR | EDUC 440[4] | Classroom Management/Elementary | | | 3 |
| MAJOR | EDUC 441[4] | Student Teaching Plan-Elementary | | | 2 |
| MAJOR | EDUC 442[4] | Student Teaching Instr.-Elementary | | | 3 |
| MAJOR | EDUC 443[4] | Student Teaching Mgmt.-Elementary | | | 2 |
| MAJOR | EDUC 444[4] | *Student Teaching Pro. Dev.-Elementary | 3 | | |
| MAJOR | EDUC 451 | E.C.E Student Teaching | 5 | | |
| GE PHIL | ED/P 306 | Philosophy of Education | 3 | | |
| GE HUMN | HIST 110 or 111 | History of U.S. | 3 | | |
| GE ELECT | ECO 410 | Economics for Educators | 3 | | |
| GE ELECT | THTR 110 | Introduction to Theatre | 3 | | |
| | | | **17** | | **13** |

**Total: 134 CREDITS**

*Includes service-learning component

NOTE: see page 278 for footnotes.

# ELEMENTARY EDUCATION

| | Dept. and No. | Descriptive Title of Course | Credits FALL | Credits SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| MAJOR | EDUC 121 | Foundations of Education | | 3 |
| MAJOR | EDUC 180 | Field Experience I | 1 | 1 |
| COGNATE | EDUC 140 | *Early Childhood Education | 3 | |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | | 3 |
| GE QUAN | MATH 104 | Math for Elementary Teacher | 3 | |
| GE PHIL | PHIL 120 | Introduction to Philosophy | | 3 |
| GE T/RS | T/RS 121 | Theology I | | 3 |
| GE NSCI | PHYS 102 | Earth Science | 3 | |
| GE S/BH | PSYC 110 | Fundamentals of Psychology | 3 | |
| FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE PHED | PHED | Physical Education | | 1 |
| | | | **16-17** | **16-17** |
| | | **SECOND YEAR** | | |
| MAJOR | EDUC. 222 | Educational Psychology | 3 | |
| MAJOR | EDUC. 280 | Field Experience II | 1 | 1 |
| MAJOR | EDUC 241 | *Foundations of Reading Inst. | | 3 |
| COGNATE | BIOL 100 | Mod. Concepts of Biology and Lab | 4 | |
| COGNATE | NURS 100 | Family Health | | 3 |
| COGNATE | ENGL 130 | Children's Literature | | 3 |
| GE T/RS-PHIL | T/RS 122-PHIL 210 | Theology II - Ethics | 3 | 3 |
| GE ELECT | GEOG 134 | World Regional Geography | 3 | |
| GE S/BH | PSYC 221 | Childhood & Adolescence | 3 | |
| GE ELECT | PS 135 | State and Local Government | | 3 |
| GE PHED | PHED ELECT[6] | Physical Education | 1 | 1 |
| | | | **17-18** | **16-17** |
| | | **THIRD YEAR**[3] | | |
| MAJOR | EDUC 344-345 | Science Methods - Lang. Arts Methods | 3 | 3 |
| MAJOR | EDUC 347 | Instr. Strategies for Reading | 3 | |
| MAJOR | EDUC 346 | Social Studies Methods | | 3 |
| MAJOR | EDUC 380 | Field Experience III | 1 | |
| MAJOR | EDUC 242 | *Math Methods for Elementary Tchg. | 3 | |
| COGNATE | EDUC 341 | Educ. Exceptional Child | | 3 |
| COGNATE | EDUC 342 | Educational Media/Tech. | | 3 |
| COGNATE | NSCI 201 | Science/Human Environment | | 3 |
| GE NSCI | CHEM 100 | Elements of Chemistry | 3 | |
| GE HUMN | ARMU 140-141 | Perceiving the Arts | 3 | 3 |
| | | | **16** | **18** |
| | | **FOURTH YEAR**[3,5] | | |
| MAJOR | EDUC 440[4] | Classroom Management/Elementary | | 3 |
| MAJOR | EDUC 441[4] | Student Teaching Plan.-Elementary | | 2 |
| MAJOR | EDUC 442[4] | Student Teaching Instr.-Elementary | | 3 |
| MAJOR | EDUC 443[4] | Student Teaching Mgmt.-Elementary | | 2 |
| MAJOR | EDUC 444[4] | *Student Teaching Pro. Dev.-Elementary | | 3 |
| COGNATE | EDUC 343 | Evaluation & Measurement | 3 | |
| GE PHIL | ED/P 306 | Philosophy of Education | 3 | |
| GE HUMN | HIST 110 or 111 | History of U.S. | 3 | |
| GE ELECT | THTR 110 | Introduction to Theatre | 3 | |
| GE HUMN | HUMN | Lit. Elective | 3 | |
| GE ELECT | ECO 410 | Economics for Educators | 3 | |
| | | | **18** | **13** |
| | | | | **Total: 132 CREDITS** |

*Includes service-learning component
NOTE: see page 278 for footnotes.

# SECONDARY EDUCATION (BIOLOGY)

| | Dept. and No. | Descriptive Title of Course | Credits FALL | Credits SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| MAJOR | EDUC 121 | Foundations of Education | 3 | |
| MAJOR | EDUC 180 | Field Experience I | | 1 |
| COGNATE | BIOL 141-142 | General Biology I-II | 4½ | 4½ |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | | 3 |
| GE QUAN | MATH 103 | Pre-calculus | 4 | |
| GE PHIL | PHIL 120 | Introduction to Philosophy | 3 | |
| GE T/RS | T/RS 121 | Theology I | | 3 |
| GE HUMN[1] | HUMN | Humanities Elective | | 3 |
| FSEM | INTD 100 | *Freshman Seminar | 1 | |
| | | | **18½** | **17½** |
| | | **SECOND YEAR[3]** | | |
| MAJOR | EDUC 222 | Educational Psychology | 3 | |
| MAJOR | EDUC 280 | Field Experience II | 1 | |
| COGNATE | BIOL 201 | Anatomy & Physiology | 3 | |
| COGNATE | BIOL 250 | Microbiology | | 5 |
| COGNATE | CHEM 112-113 | General Chemistry I-II | 4½ | 4½ |
| GE HUMN[1] | HUMN | Humanities Elective | 3 | 3 |
| GE NSCI | PHYS 102 | Earth Science | | 3 |
| GE S/BH | PSYC 110 | Fundamentals of Psychology | 3 | |
| GE S/BH | PSYC 221 | Childhood and Adolescence | | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | |
| | | | **18½** | **18½** |
| | | **THIRD YEAR[3]** | | |
| MAJOR | EDUC 313 | General Methods and Planning | 3 | |
| MAJOR | EDUC 314 | *Specific Subject Methods | | 3 |
| MAJOR | EDUC 340 | Reading in Secondary Schools | | 3 |
| MAJOR | EDUC 380 | Field Experience III | 1 or | 1 |
| COGNATE | BIOL 260 | Genetics | 4½ | |
| COGNATE | BIOL 370 | Animal Behavior | | 4½ |
| COGNATE | BIOL 375 | Evolution | 3 | |
| GE PHIL | PHIL 210 | Ethics | 3 | |
| GE T/RS | T/RS 122 | Theology II | | 3 |
| GE HUMN[1] | HUMN | Humanities Elective | 3 | |
| GE ELECT | ED/P 306 | Philosophy of Education | | 3 |
| GE PHED | PHED | Physical Education | 1 or | 1 |
| | | | **17½** | **17½** |
| | | **FOURTH YEAR[3,5]** | | |
| MAJOR | EDUC 475[4] | Classroom Management/Secondary | 3 | |
| MAJOR | EDUC 476[4] | Student Teaching Plan.-Sec Ed | 2 | |
| MAJOR | EDUC 477[4] | Student Teaching Instr.-Sec Ed | 3 | |
| MAJOR | EDUC 478[4] | Student Teaching Mgmt.-Sec Ed | 2 | |
| MAJOR | EDUC 479[4] | *Student Teaching Pro. Dev.-Sec Ed | 3 | |
| GE ELECT | PHIL 431 | Philosophy of Science | | 3 |
| GE NSCI | PHYS 120 | General Physics | | 4 |
| GE ELECT | NSCI 201 | Science in Human Environment | | 3 |
| GE PHIL-T/RS | PHIL-T/RS ELECT | Elective | | 3 |
| GE ELECT | ELECT | Open Electives | | 3 |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **13** | **17** |

**Total: 138 CREDITS**

Service commitment is 20 hours in Freshman Seminar with no service requirement in sophomore year.
*Includes service-learning component
Note: see page 278 for footnotes.

# SECONDARY EDUCATION (CHEMISTRY)

| | Dept. and No. | Descriptive Title of Course | Credits FALL | SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR**[3] | | |
| MAJOR | EDUC 121 | Foundations of Education | 3 | |
| MAJOR | EDUC 180 | Field Experience I | | 1 |
| COGNATE | CHEM 112-113 | General Analytical Chem I-II | 4½ | 4½ |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | | 3 |
| GE QUAN | MATH 114 | Analysis I | 4 | |
| GE PHIL | PHIL 120 | Introduction to Philosophy | 3 | |
| GE T/RS | T/RS 121 | Theology I | | 3 |
| GE HUMN[1] | HUMN | Humanities Elective | | 3 |
| FSEM | INTD 100 | *Freshman Seminar | | 1 |
| | | | **17½** | **18½** |
| | | **SECOND YEAR**[3] | | |
| MAJOR | EDUC 222 | Educational Psychology | 3 | |
| MAJOR | EDUC 280 | Field Experience II | 1 | |
| COGNATE | CHEM 232-233 | Organic Chemistry I-II | 4½ | 4½ |
| COGNATE | BIOL 141 | General Biology | 4½ | |
| GE PHIL | PHIL 210 | Ethics | 3 | |
| GE T/RS | T/RS 122 | Theology II | | 3 |
| GE NSCI | PHYS 102 | Earth Science | | 3 |
| GE S/BH | PSYC 110 | Fundamentals of Psychology | | 3 |
| GE S/BH | PSYC 221 | Childhood & Adolescence | | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **17** | **17½** |
| | | **THIRD YEAR**[3] | | |
| MAJOR | EDUC 313 | General Methods and Planning | 3 | |
| MAJOR | EDUC 314 | *Specific Subject Methods | | 3 |
| MAJOR | EDUC 340 | Reading in Secondary School | | 3 |
| MAJOR | EDUC 380 | Field Experience III | 1 | |
| COGNATE | CHEM 350 | General Biochemistry I | 3 | |
| COGNATE | CHEM 104 | Science & Society | | 3 |
| COGNATE | PHYS 120 | General Physics I | 4 | |
| GE ELEC | PHIL 432 | Philosophy of Technology | 3 | |
| GE HUMN* | HUMN | Humanities Elective | 3 | 3 |
| GE NSCI | NSCI 201 | Science & Human Environment | | 3 |
| GE ELECT | PHIL 431 | Philosophy of Science | | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | |
| | | | **18** | **18** |
| | | **FOURTH YEAR**[3,5] | | |
| MAJOR | EDUC 475[4] | Classroom Management/Secondary | | 3 |
| MAJOR | EDUC 476[4] | Student Teaching Plan.-Secondary | | 2 |
| MAJOR | EDUC 477[4] | Student Teaching Instr.-Secondary | | 3 |
| MAJOR | EDUC 478[4] | Student Teaching Mgmt.-Secondary | | 2 |
| MAJOR | EDUC 479[4] | *Student Teaching Pro. Dev.-Secondary | | 3 |
| COGNATE | CHEM 360 | Biophysical Chemistry | 4½ | |
| GE HUMN* | HUMN | Humanities Elective | 3 | |
| GE PHIL-T/RS | PHIL-T/RS ELECT | Elective | 3 | |
| GE ELECT | ELECT | Open Electives | 6 | |
| GE PHED | PHED ELECT | Physical Education | 1 | |
| | | | **17½** | **13** |

**Total: 137 CREDITS**

Service commitment is 20 hours in Freshman Seminar with no service requirement in sophomore year.
*Includes service-learning component
Note: see page 278 for footnotes.

# SECONDARY EDUCATION (COMMUNICATION)

| | Dept. and No. | Descriptive Title of Course | Credits FALL | SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR**[3] | | |
| MAJOR | EDUC 121-180 | Foundations of Education-Field I | 3 | 1 |
| COGNATE | COMM ELECT | Communication Process | | 3 |
| GE SPCH-WRTG | COMM 100-WRTG-107 | Public Speaking-Composition | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | 3 | |
| GE QUAN | ELECT | Quant. Reasoning Elective | | 3 |
| GE PHIL-T/RS | PHIL 120-T/RS 121 | Intro to Philosophy-Theology 1 | 3 | 3 |
| GE ELECT | ENGL 140 | English Inquiry | 3 | |
| GE S/BH | PSYC 110 | Fundamentals of Psychology | | 3 |
| FSEM | INTD 100 | *Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **16** | **17** |
| | | **SECOND YEAR**[3] | | |
| MAJOR | EDUC 222-280 | Educational Psychology-Field II | 3 | 1 |
| COGNATE | COMM ELECT | Communication Process | 3 | |
| COGNATE | COMM ELECT | Communication Option | | 3 |
| COGNATE | ENGL | British Literature | 3 | |
| GE T/RS | T/RS 122 | Theology II | | 3 |
| GE HUMN[1] | ENGL | American Lit. Elective | | 3 |
| GE ELECT | WRTG 210 | Advanced Composition | | 3 |
| GE NSCI | NSCI | Natural Science Electives | 3 | 3 |
| GE S/BH | S/BH | S/BH Elective | 3 | |
| GE HUMN | HUMN | Humanities Elective | 3 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **18** | **17** |
| | | **THIRD YEAR**[3] | | |
| MAJOR | EDUC 313-380 | General Methods and Planning-Field III | 3 | 1 |
| MAJOR | EDUC 314 | *Specific Subject Methods | | 3 |
| MAJOR | EDUC 340 | Reading in Secondary School | | 3 |
| COGNATE | LIT-ENGL | World Lit.-American Lit. | 3 | 3 |
| COGNATE | ENGL 310 | Strat. Teaching Writing | 3 | |
| COGNATE | ENGL 460 | Tchg. Modern Grammar | | 3 |
| COGNATE | COMM ELECT | Communication Option | 3 | 3 |
| GE HUMN[1] | HUMN | Humanities Elective | 3 | |
| GE ELECT | LIT or ENGL | Minority Literature | 3 | |
| GE PHED | PHED | Physical Education | | 1 |
| | | | **18** | **17** |
| | | **FOURTH YEAR**[3,5] | | |
| MAJOR | EDUC 475[4] | Classroom Management/Secondary | | 3 |
| MAJOR | EDUC 476[4] | Student Teaching Plan.-Secondary | | 2 |
| MAJOR | EDUC 477[4] | Student Teaching Instr.-Secondary | | 3 |
| MAJOR | EDUC 478[4] | Student Teaching Mgmt.-Secondary | | 2 |
| MAJOR | EDUC 479[4] | *Student Teaching Pro. Dev.-Secondary | | 3 |
| COGNATE | COMM ELECT | Communication Option | 3 | |
| GE PHIL | PHIL 210 | Ethics | 3 | |
| GE PHIL | ED/P 306 | Philosophy of Education | 3 | |
| COGNATE | ELECT | Communication Electives | 3 | |
| GE HUMN | HUMN ELECT | Open Elective | 6 | |
| | | | **18** | **13** |
| | | | | **Total: 131 CREDITS** |

Service commitment is 20 hours in Freshman Seminar with no service requirement in sophomore year.
*Includes service-learning component
Note: see page 278 for footnotes.

# SECONDARY EDUCATION (ENGLISH)

| | Dept. and No. | Descriptive Title of Course | Credits FALL | | SPRING |
|---|---|---|---|---|---|
| | | **FIRST YEAR**[3] | | | |
| MAJOR | EDUC 121 | Foundations of Education | 3 | | |
| MAJOR | EDUC 180 | Field Experience I | 1 | or | 1 |
| COGNATE | ENGL 140 | English Inquiry | 3 | | |
| COGNATE | ELECT | American Lit. Elective | | | 3 |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Compositon | 3 | | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | | | 3 |
| GE QUAN | ELECT | Quant Reasoning Elective | 3 | | |
| GE PHIL | PHIL 120 | Introduction to Philosophy | 3 | | |
| GE T/RS | T/RS 121 | Theology I | | | 3 |
| GE S/BH | PSYC 110 | Fundamentals of Psychology | | | 3 |
| FSEM | INTD 100 | *Freshman Seminar | 1 | | |
| GE PHED | PHED | Physical Education | | | 1 |
| | | | **16-17** | | **16-17** |
| | | **SECOND YEAR**[3] | | | |
| MAJOR | EDUC 222-280 | Educational Psych.-Field Experience II | 3 | | 1 |
| COGNATE | ELECT | English Literature | 3 | | |
| COGNATE | ELECT | American Literature | 3 | | 3 |
| COGNATE | ENGL 134 | Shakespeare | | | 3 |
| COGNATE | ELECT | Theatre Elective | | | 3 |
| GE PHIL | PHIL 210 | Ethics | 3 | | |
| GE ELECT | WRTG 210 | Advanced Composition | | | 3 |
| GE HUMN | HUMN | Rep. World Literature | | | 3 |
| GE NSCI | NSCI | Natural Science Elective | 3 | | |
| GE S/BH | S/BH | Social/Behavioral Elective | 3 | | |
| GE PHED | PHED ELECT | Physical Education | | | 1 |
| | | | **18** | | **17** |
| | | **THIRD YEAR**[3] | | | |
| MAJOR | EDUC 313 | General Methods and Planning | 3 | | |
| MAJOR | EDUC 314 | *Specific Subject Methods | | | 3 |
| MAJOR | EDUC 340 | Reading Sec. School | | | 3 |
| MAJOR | EDUC 380 | Field Experience III | 1 | | |
| COGNATE | ENGL 225 | Writing Women | | | 3 |
| COGNATE | ENGL 310 | Strat. for Teaching Writing | 3 | | |
| COGNATE | ENGL 460 | Teaching Modern Grammar | | | 3 |
| COGNATE | ELECT | Minority Literature | 3 | | |
| GE T/RS | T/RS 122 | Theology II | 3 | | |
| GE NSCI | NSCI | Natural Science Elective | | | 3 |
| GE HUMN | HUMN | Writing Elective | | | 3 |
| GE HUMN | HUMN | Humanities Elective | 3 | | |
| GE PHED | PHED | Physical Education | 1 | | |
| | | | **17** | | **18** |
| | | **FOURTH YEAR**[3,5] | | | |
| MAJOR | EDUC 475[4] | Classroom Management-Secondary | | | 3 |
| MAJOR | EDUC 476[4] | Student Teaching Plan.-Secondary | | | 2 |
| MAJOR | EDUC 477[4] | Student Teaching Instr.-Secondary | | | 3 |
| MAJOR | EDUC 478[4] | Student Teaching Mgmt.-Secondary | | | 2 |
| MAJOR | EDUC 479[4] | *Student Teaching Pro. Dev.-Secondary | | | 3 |
| COGNATE | ELECT | English Literature | 3 | | |
| GE PHIL | ED/P 306 | Philosophy of Education | 3 | | |
| GE HUMN | HUMN | Rep. World Literature | 3 | | |
| GE ELECT | ELECT | Open Elective | 9 | | |
| | | | **18** | | **13** |
| | | | | | **Total: 134 CREDITS** |

Service commitment is 20 hours in Freshman Seminar with no service requirement in sophomore year.
*Includes service-learning component
NOTE: see page 278 for footnotes.

# SECONDARY EDUCATION (GENERAL SCIENCE)

| | Dept. and No. | Descriptive Title of Course | Credits FALL | Credits SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR**[3] | | |
| MAJOR | EDUC 121-180 | Foundations of Education-Field I | 3 | 1 |
| COGNATE | BIOL 141-142 | General Biology I-II | 4½ | 4½ |
| GE SPCH | COMM 100 | Public Speaking | 3 | |
| GE WRTG | WRTG 107 | Composition | 3 | |
| GE C/IL | C/IL 102 | Computing and Information Literacy | | 3 |
| GE QUAN | MATH 114 | Analysis I | | 4 |
| GE PHIL | PHIL 120 | Introduction to Philosophy | 3 | |
| GE T/RS | T/RS 121 | Theology I | | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | | 3 |
| FSEM | INTD 100 | *Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | 1 | |
| | | | **18½** | **18½** |
| | | **SECOND YEAR**[3] | | |
| MAJOR | EDUC 222 | Educational Psychology | 3 | |
| MAJOR | EDUC 280 | Field Experience II | 1 | |
| COGNATE | PHYS 120-121 | General Physics I-II | 4 | 4 |
| COGNATE | CHEM 112-113 | Gen./Analy. Chem I-II | 4½ | 4½ |
| GE PHIL | PHIL 210 | Ethics | 3 | |
| GE T/RS | T/RS 122 | Theology II | | 3 |
| GE S/BH | PSYC 110 | Fundamentals of Psychology | | 3 |
| GE HUMN | ELECT | Humanities Electives | 3 | 3 |
| | | | **18½** | **17½** |
| | | **THIRD YEAR**[3] | | |
| MAJOR | EDUC 313 | General Methods and Planning | 3 | |
| MAJOR | EDUC 380-314 | *Field III-Specific Subject Meth. | 1 | 3 |
| MAJOR | EDUC 340 | Reading in Secondary School | | 3 |
| COGNATE | COGNATE ELECT | Environmental Context | 3 | |
| COGNATE | COGNATE ELECT | Technological Context | 3 | |
| GE ELECT | PHIL 431 | Philosophy of Science | 3 | |
| GE NSCI | PHYS 101-102 | Modern Astronomy-Earth Science | 3 | 3 |
| GE S/BH | PSYC 221 | Childhood & Adolescence | | 3 |
| GE ELECT | PHIL 432 | Philosophy of Technology | | 3 |
| GE PHED | PHED ELECT | Physical Education | | 2 |
| | | | **16** | **17** |
| | | **FOURTH YEAR**[3,5] | | |
| MAJOR | EDUC 475[4] | Classroom Management-Secondary | | 3 |
| MAJOR | EDUC 476[4] | Student Teaching Plan.-Secondary | | 2 |
| MAJOR | EDUC 477[4] | Student Teaching Instr.-Secondary | | 3 |
| MAJOR | EDUC 478[4] | Student Teaching Mgmt.-Secondary | | 2 |
| MAJOR | EDUC 479[4] | *Student Teaching Pro. Dev.-Secondary | | 3 |
| COGNATE | ELECT | Environmental Context | 3 | |
| COGNATE | CHEM 104 | Science & Society | 3 | |
| GE HUMN | HUMN ELECT | Humanities Elective | 3 | |
| GE ELECT | ELECT | Open Electives | 6 | |
| GE PHIL/T/RS | ELECT | Open Elective | 3 | |
| | | | **18** | **13** |
| | | | | **Total: 137 CREDITS** |

Service commitment is 20 hours in Freshman Seminar with no service requirement in sophomore year.
*Includes service-learning component
Note: see page 278 for footnotes.

# SECONDARY EDUCATION (LATIN)

| | Dept. and No. | Descriptive Title of Course | Credits FALL | | Credits SPRING |
|---|---|---|---|---|---|
| | | **FIRST YEAR**[3] | | | |
| MAJOR | EDUC 121 | Foundations of Education | 3 | | |
| MAJOR | EDUC 180 | Field Experience I | 1 | or | 1 |
| COGNATE | LAT 211-212 | Intermediate Latin I-II | 3 | | 3 |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 3 | | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | | | 3 |
| GE QUAN | ELECT | Quant. Reasoning Elective | 3 | | |
| GE PHIL | PHIL 120 | Introduction to Philosophy | 3 | | |
| GE T/RS | T/RS 121 | Theology I | | | 3 |
| GE S/BH | PSYC 110 | Fundamentals of Psychology | | | 3 |
| FSEM-PHED | INTD 100-PHED ELECT | *Freshman Seminar-Physical Education | 1 | | 1 |
| | | | **16-17** | | **16-17** |
| | | **SECOND YEAR**[3] | | | |
| MAJOR | EDUC 222-280 | Educational Psych.-Field Exp. II | 3 | | 1 |
| COGNATE | ELECT | Latin Electives | 6 | | 6 |
| GE PHIL | T/RS 122 | Theology II | | | 3 |
| GE HUMN | HUMN | Humanities Electives | 3 | | 3 |
| GE NSCI | NSCI | Natural Science Electives | 3 | | 3 |
| GE S/BH | PSYC 221 | Childhood & Adolescence | 3 | | |
| GE PHED | PHED ELECT | Physical Education | | | 1 |
| | | | **18** | | **17** |
| | | **THIRD YEAR**[3] | | | |
| MAJOR | EDUC 313 | General Methods and Planning | 3 | | |
| MAJOR | EDUC 380-314 | *Field III-Specific Subj. Meth. | 1 | | 3 |
| MAJOR | EDUC 340 | Reading in Secondary School | | | 3 |
| COGNATE | ELECT | Latin Electives | 6 | | 3 |
| COGNATE | ELECT | Related Electives | | | 3 |
| GE PHIL | ED/P 306 | Philsosphy of Education | | | 3 |
| GE PHIL | PHIL 210 | Ethics | 3 | | |
| GE ELECT | SOC 234 | Cultural Anthropology | | | 3 |
| GE ELECT | ELECT | Open Elective | 3 | | |
| GE PHED | PHED ELECT | Physical Education | 1 | | |
| | | | **17** | | **18** |
| | | **FOURTH YEAR**[3,5] | | | |
| MAJOR | EDUC 475[4] | Classroom Management-Secondary | | | 3 |
| MAJOR | EDUC 476[4] | Student Teaching Plan.-Secondary | | | 2 |
| MAJOR | EDUC 477[4] | Student Teaching Instr.-Secondary | | | 3 |
| MAJOR | EDUC 478[4] | Student Teaching Mgmt.-Secondary | | | 2 |
| MAJOR | EDUC 479[4] | *Student Teaching Pro. Dev.-Secondary | | | 3 |
| COGNATE | ELECT | Latin Elective | 3 | | |
| COGNATE | ELECT | Related Elective | 3 | | |
| GE HUMN | HUMN | Humanities Electives | 6 | | |
| GE ELECT | ELECT | Open Electives | 6 | | |
| | | | **18** | | **13** |
| | | | | | **Total: 134 CREDITS** |

Service commitment is 20 hours in Freshman Seminar with no service requirement in sophomore year.
*Includes service-learning component
Note: see page 278 for footnotes.

# SECONDARY EDUCATION (MATH)

| | Dept. and No. | Descriptive Title of Course | Credits FALL | SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR**[3] | | |
| MAJOR | EDUC 121-180 | Foundations of Education-Field I | 3 | 1 |
| COGNATE | MATH 103[6] | Precalculus | 4 | |
| COGNATE | MATH 114 | Analysis I | | 4 |
| COGNATE | MATH 142 | Discrete Structures | 4 | |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | | 3 |
| GE ELECT | CMPS 134 | Computer Science I | | 3 |
| GE PHIL | PHIL 120 | Introduction to Philosophy | 3 | |
| GE T/RS | T/RS 121 | Theology I | | 3 |
| FSEM | INTD 100 | *Freshman Sem.-Physical Education | 1 | 1 |
| | | | **18** | **18** |
| | | **SECOND YEAR**[3] | | |
| MAJOR | EDUC 222-280 | Educational Psych.-Field II | 3 | 1 |
| COGNATE | MATH 221-222 | Analysis II-III | 4 | 4 |
| GE PHIL | T/RS 122 | Theology II | | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | 3 | |
| GE NSCI | NSCI ELECT | Natural Science Elective | 3 | 3 |
| GE S/BH | PSYC 110 | Fundamentals of Psychology | 3 | |
| GE S/BH | S/BH | Social/Behavioral Elective | | 3 |
| GE ELECT | ELECT | Open Elective | | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **17** | **18** |
| | | **THIRD YEAR**[3] | | |
| MAJOR | EDUC 313 | General Methods and Planning | 3 | |
| MAJOR | EDUC 380-314 | *Field III-Specific Subj. Meth. | 1 | 3 |
| MAJOR | EDUC 340 | Reading in Secondary School | | 3 |
| MAJOR | EDUC 312 | Secondary Math Curriculum | 3 | |
| COGNATE | MATH 204 | Special Topics Statistics | | 3 |
| COGNATE | MATH 345 | Geometry | 3 | |
| COGNATE | MATH 202 | History of Math | 3 | |
| COGNATE | MATH 351 | Linear Algebra | | 3 |
| GE PHIL | PHIL 210 | Ethics | 3 | |
| GE HUMN | HUMN ELECT | Humanities Electives | 3 | 3 |
| GE ELECT | ELECT | Open Elective | | 3 |
| | | | **19** | **18** |
| | | **FOURTH YEAR**[3,5] | | |
| MAJOR | EDUC 475[4] | Classroom Management-Secondary | | 3 |
| MAJOR | EDUC 476[4] | Student Teaching Plan.-Secondary | | 2 |
| MAJOR | EDUC 477[4] | Student Teaching Instr.-Secondary | | 3 |
| MAJOR | EDUC 478[4] | Student Teaching Mgmt.-Secondary | | 2 |
| MAJOR | EDUC 479[4] | *Student Teaching Pro. Dev.-Secondary | | 3 |
| COGNATE | MATH 448 | Modern Algebra | 3 | |
| COGNATE | COGNATE ELECT | Related Elective | 3 | |
| GE PHIL | ED/P 306 | Philosophy of Education | 3 | |
| GE HUMN | ELECT | Humanities Elective | 3 | |
| GE ELECT | ELECT | Open Electives | 3 | |
| | | | **15** | **13** |
| | | | **Total: 136 CREDITS** | |

Service commitment is 20 hours in Freshman Seminar with no service requirement in sophomore year.
*Includes service-learning component
Note: see page 278 for footnotes.

# SECONDARY EDUCATION (MODERN LANGUAGE)

| | Dept. and No. | Descriptive Title of Course | Credits FALL | Credits SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR**[3] | | |
| MAJOR | EDUC 121 | Foundations of Education | 3 | |
| MAJOR | EDUC 180 | Field Experience I | 1 | 1 |
| COGNATE | MLANG 311-312* | Advanced Comp.-Conv. I-II | 3 | 3 |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | 3 | |
| GE PHIL-T/RS | T/RS 121-PHIL 120 | Theology I-Intro. to Philosophy | 3 | 3 |
| GE NSCI | NSCI | Natural Science Elective | | 3 |
| GE S/BH | PSYC 110 | Fundamentals of Psychology | | 3 |
| FSEM | INTD 100 | *Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **16-17** | **16-17** |
| | | **SECOND YEAR**[3] | | |
| MAJOR | EDUC 222-280 | Educational Psych.-Field Exp. II | 3 | 1 |
| COGNATE | MLANG 321-322** | Stylistics I-II | 3 | 3 |
| COGNATE | ELECT | Modern Lang. Electives | 3 | 3 |
| GE QUAN | ELECT | Quant. Reasoning Elective | 3 | |
| GE PHIL | T/RS 122 | Theology II | | 3 |
| GE HUMN | HUMN | Humanities Elective | 3 | |
| GE NSCI | NSCI | Natural Science Elective | | 3 |
| GE S/BH | PSYC 221 | Childhood & Adolescence | | 3 |
| GE ELECT | ELECT | Open Elective | 3 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **18** | **17** |
| | | **THIRD YEAR**[3] | | |
| MAJOR | EDUC 313 | General Methods and Planning | 3 | |
| MAJOR | EDUC 380-314 | *Field Exp. III-Specific Subj. Meth. | 1 | 3 |
| MAJOR | EDUC 340 | Reading in Secondary School | | 3 |
| COGNATE | COGNATE ELECT | Modern Language Electives | 6 | 3 |
| COGNATE | COGNATE ELECT | Related Electives | 3 | 3 |
| GE HUMN | ELECT | Humanities Electives | 3 | 3 |
| GE ELECT | SOC 234 | Cultural Anthropology | | 3 |
| GE PHED | PHED | Physical Education | 1 | |
| | | | **17** | **18** |
| | | **FOURTH YEAR**[3,5] | | |
| MAJOR | EDUC 475[4] | Classroom Management-Secondary | | 3 |
| MAJOR | EDUC 476[4] | Student Teaching Plan.-Secondary | | 2 |
| MAJOR | EDUC 477[4] | Student Teaching Instr.-Secondary | | 3 |
| MAJOR | EDUC 478[4] | Student Teaching Mgmt.-Secondary | | 2 |
| MAJOR | EDUC 479[4] | *Student Teaching Pro. Dev.-Secondary | | 3 |
| COGNATE | ELECT | Modern Language Elective | 3 | |
| GE PHIL | ED/P. 306 | Philosophy of Education | 3 | |
| GE PHIL | PHIL 210 | Ethics | 3 | |
| GE HUMN | HUMN | Humanities Elective | 3 | |
| GE ELECT | ELECT | Related Elective | 3 | |
| GE ELECT | ELECT | Open Elective | 3 | |
| | | | **18** | **13** |
| | | | **Total: 134 CREDITS** | |

* Spanish, French or German should be selected as a specialization within Modern Language (MLANG).

** Students whose specialization within Modern Languages is Spanish are required to take SPAN 313, SPAN 314, SPAN 320, and SPAN 321. In Spanish, there is no Advanced Stylistics II.

Service commitment is 20 hours in Freshman Seminar with no service requirement in sophomore year.
*Before course name includes service-learning component.
Note: see page 278 for footnotes.

# SECONDARY EDUCATION (PHYSICS)

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR**[3] | **FALL** | **SPRING** |
| MAJOR | EDUC 121-180 | Foundations of Education-Field I | 3 | 1 |
| COGNATE | PHYS 140-141 | Elements of Physics I-II | 4 | 4 |
| COGNATE | MATH 221 | Analysis II | | 4 |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 3 | 3 |
| GE C/IL | MATH 114 | Analysis I | 4 | |
| GE QUAN | C/IL 102 | Computing and Information Literacy | 3 | |
| GE PHIL | PHIL 120 | Intro. Phil. | | 3 |
| GE HUMN | ELECT | Humanities Elective | | 3 |
| FSEM | INTD 100 | *Freshman Seminar | 1 | |
| | | | **18** | **18** |
| | | **SECOND YEAR**[3] | | |
| MAJOR | EDUC 222-280 | Educational Psychology-Field II | 3 | 1 |
| COGNATE | MATH 222 | Analysis III | 4 | |
| COGNATE | PHYS 270 | Modern Physics | 4 | |
| COGNATE | PHYS 350 | Applied & Engr. Math | | 3 |
| COGNATE | PHYS ELECT | Physics Elective | | 3 |
| GE PHIL | PHIL 210 | Ethics | | 3 |
| GE T/RS | T/RS 121-122 | Theology I-II | 3 | 3 |
| GE S/BH | PSYC 110 | Fundamentals of Psychology | 3 | |
| GE S/BH | PSYC 221 | Childhood & Adolescence | | 3 |
| GE PHED | PHED | Physical Education | 1 | 1 |
| | | | **18** | **17** |
| | | **THIRD YEAR**[3] | | |
| MAJOR | EDUC 313 | General Methods and Planning | 3 | |
| MAJOR | EDUC 380-314 | *Field III-Specific Subject Meth. | 1 | 3 |
| MAJOR | EDUC 340 | Reading in Secondary School | | 3 |
| COGNATE | PHYS 473 | Optics | 3 | |
| COGNATE | PHYS ELECT | Physics Elective | | 3 |
| GE ELEC | PHIL 432 | Philosophy of Technology | 3 | |
| GE HUMN | HUMN ELECT | Humanities Elective | | 3 |
| GE NSCI | BIOL 101-PHYS 102 | Gen. Biology I-Earth Science | 3 | 3 |
| GE ELECT | CHEM 100 | General Chemistry | 3 | |
| GE ELECT | PHIL 431 | Philosophy of Science | | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | |
| | | | **17** | **18** |
| | | **FOURTH YEAR**[3,5] | | |
| MAJOR | EDUC 475[4] | Classroom Management-Secondary | | 3 |
| MAJOR | EDUC 476[4] | Student Teaching Plan.-Secondary | | 2 |
| MAJOR | EDUC 477[4] | Student Teaching Instr.-Secondary | | 3 |
| MAJOR | EDUC 478[4] | Student Teaching Mgmt.-Secondary | | 2 |
| MAJOR | EDUC 479[4] | *Student Teaching Pro. Dev.-Secondary | | 3 |
| COGNATE | PHYS 447 | Electromagnetics | 3 | |
| COGNATE | PHYS ELECT | Physics Elective | 3 | |
| GE HUMN | HUMN ELECT | Humanities Electives | 6 | |
| GE ELECT | ELECT | Open Electives | 3 | |
| GE PHIL - T/RS ELECT | PHIL - T/RS ELECT | Philosophy or T/RS elective | 3 | |
| | | | **18** | **13** |
| | | | **Total: 137 CREDITS** | |

Service commitment is 20 hours in Freshman Seminar with no service requirement in sophomore year.
*Includes service-learning component
Note: see page 278 for footnotes.

# SECONDARY EDUCATION (SOCIAL STUDIES)

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR**[3] | **FALL** | **SPRING** |
| MAJOR | EDUC 121 | Foundations of Education | 3 | |
| MAJOR | EDUC 180 | Field Experience I | 1 | 1 |
| COGNATE | HIST 110-111 | US History I-II | 3 | 3 |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | | 3 |
| GE QUAN | ELECT | Quant. Reasoning Elective | 3 | |
| GE T/RS | T/RS 121 | Theology I | 3 | |
| GE NSCI | ELECT | Natural Science Elective | | 3 |
| GE S/BH | PSYC 110 | Fundamentals of Psychology | | 3 |
| FSEM | INTD 100 | *Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **17** | **17** |
| | | **SECOND YEAR**[3] | | |
| MAJOR | EDUC 222-280 | Educational Psych.-Field II | 3 | 1 |
| COGNATE | GEOG 134 | World Regional Geography | 3 | |
| COGNATE | ELECT | Non-western History | 3 | |
| COGNATE | PS 130-131 | Am. Nat. Government I-II | 3 | 3 |
| GE PHIL | PHIL 120 | Introduction to Philosophy | | 3 |
| GE T/RS | T/RS 122 | Theology II | | 3 |
| GE HUMN | HIST 120-121 | European History I-II | 3 | 3 |
| GE NSCI | ELECT | Natural Science Elective | | 3 |
| GE ELECT | SOC 110 | Intro. to Sociology | 3 | |
| GE PHED | ELECT | Physical Education | | 1 |
| | | | **18** | **17** |
| | | **THIRD YEAR**[3] | | |
| MAJOR | EDUC 313 | General Methods and Planning | 3 | |
| MAJOR | EDUC 380-314 | *Field III-Specific Subj. Meth. | 1 | 3 |
| MAJOR | EDUC 340 | Reading in Secondary School | | 3 |
| COGNATE | SOC 234 | Cultural Anthropology | | 3 |
| COGNATE | H/PS 214 | World Politics | | 3 |
| COGNATE | PS 231 | The Public Policy Process | 3 | |
| COGNATE | ELECT | Minority History | 3 | |
| GE PHIL | ED/P. 306 | Philosophy of Education | 3 | |
| GE S/BH | PSYC 220 | Social Psychology | 3 | |
| GE ELECT | ECO 410 | Economics for Education Majors | | 3 |
| GE ELECT | SOC 112 | Social Problems | | 3 |
| GE PHED | PHED | Physical Education | 1 | |
| | | | **17** | **18** |
| | | **FOURTH YEAR**[3,5] | | |
| MAJOR | EDUC 475[4] | Classroom Management-Secondary | | 3 |
| MAJOR | EDUC 476[4] | Student Teaching Plan.-Secondary | | 2 |
| MAJOR | EDUC 477[4] | Student Teaching Instr.-Secondary | | 3 |
| MAJOR | EDUC 478[4] | Student Teaching Mgmt.-Secondary | | 2 |
| MAJOR | EDUC 479[4] | *Student Teaching Pro. Dev.-Secondary | | 3 |
| COGNATE | ELECT | History or Pol. Sci. Electives | 6 | |
| GE PHIL | PHIL 210 | Ethics | 3 | |
| GE HUMN | HUMN | Humanities Electives | 6 | |
| GE ELECT | ELECT | Open Elective | 3 | |
| | | | **18** | **13** |
| | | | **Total: 134 CREDITS** | |

Service commitment is 20 hours in Freshman Seminar with no service requirement in sophomore year.
*Includes service-learning component
Note: see page 278 for footnotes.

# SPECIAL EDUCATION

| | Dept. and No. | Descriptive Title of Course | Credits FALL | SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR**[3] | | |
| MAJOR | EDUC 180 | Field Experience I | 1 | |
| COGNATE | EDUC 121 | Foundations of Education | 3 | |
| COGNATE | EDUC 341 | Educ. of Exceptional Child | 3 | |
| GE QUAN | MATH 104 | Math for Elem. Teachers | | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | | 3 |
| GE NSCI | PSYC 106 | Drugs and Behavior | | 3 |
| GE S/BH | PSYC 110 | Fundamentals of Psychology | 3 | |
| GE S/BH | PSYC 221 | Childhood and Adolescence | | 3 |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 3 | 3 |
| GE PHIL-T/RS | PHIL 120-T/RS 121 | Introduction to Philosophy-Theology I | 3 | 3 |
| GE FSEM | INTD 100 | *Freshman Seminar | 1 | |
| | | | **17** | **18** |
| | | **SECOND YEAR**[3] | | |
| MAJOR | EDUC 280 | Field Experience II | | 1 |
| MAJOR | EDUC 265 | SPED Educational Assessment | | 3 |
| MAJOR | EDUC 258 | Assessment Practicum | | 1 |
| MAJOR | EDUC 226 | Sec., Transitional & Voc. Services | | 3 |
| MAJOR | EDUC 267 | Learning Disabilities | 3 | |
| COGNATE | EDUC 222 | Educational Psychology | 3 | |
| COGNATE | EDUC 120 | Applied Statistics | 3 | |
| COGNATE | HS 241 | Case Management & Interviewing | | 3 |
| COGNATE | EDUC 241 | *Foundations of Reading Inst. | 3 | |
| COGNATE | PSYC 225 | Abnormal Psychology | 3 | |
| GE NSCI | PSYC 231/PSYC 105 | Behavioral Neuroscience/Brain and Human Nature | | 3 |
| GE PHIL | PHIL 210 | Ethics | 3 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **18** | **15** |
| | | **THIRD YEAR**[3] | | |
| MAJOR | EDUC 380 | Field Experience III | | 1 |
| MAJOR | EDUC 369 | Early Assessment & Intervention | 3 | |
| MAJOR | EDUC 367 | Designing Curriculum for Elem. SPED | 3 | |
| MAJOR | EDUC 368 | Designing Curriculum for Sec. SPED | | 3 |
| MAJOR | EDUC 364 | *Inclusionary Classroom Practices | 3 | |
| MAJOR | EDUC 366 | Emotional & Behavioral Disabilities | | 3 |
| COGNATE | EDUC 342 | Educational Media/Tech. | 3 | |
| COGNATE | HS 322-333 | Mental Retardation-Multiculturalism in HS | 3 | 3 |
| GE HUMN | ELECT[1] | Humanities Elective | | 3 |
| GE ELECT | ENGL 130 or EDUC 131 | Children's Lit. or Exp. Cult. Div. Child Lit. | 3 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| GE T/RS | T/RS 122 | Theology II | | 3 |
| | | | **18** | **17** |
| | | **FOURTH YEAR**[3,4] | | |
| MAJOR | EDUC 365[4] | Professional Seminar | | 3 |
| MAJOR | EDUC 460 | Classroom Mgt. for SPED | | 3 |
| MAJOR | EDUC 461[4] | Planning in SPED Student Teaching | | 2 |
| MAJOR | EDUC 462[4] | Instruction in SPED Student Teaching | | 3 |
| MAJOR | EDUC 463[4] | Managing SPED Instruction | | 2 |
| MAJOR | EDUC 464[4] | *Professional Growth in SPED | | 3 |
| COGNATE | HS | Physical Disabilities | 3 | |
| GE HUMN | ELECT | Humanities Elective | 9 | |
| GE PHIL | ED/P 306 | Philosophy of Education | 3 | |
| PHED | PHED ELECT | Physical Education | 1 | |
| | | | **16** | **16** |
| | | | | **Total: 135 CREDITS** |

*Includes service-learning component

Note: see page 278 for footnotes.

**EDUC 110** Prof. Cannon
**Values Development** 3 credits
A course designed to acquaint the student with theories relating to value development: what values are, and how they are formed. The affective process, value systems, activities for value-development suitable for use by parents, teachers and others involved in human relations will be covered. Open to all majors.

**EDUC 113** Staff
**Reading-Research** 3 credits
A course designed to increase a student's proficiency in reading and research. The following skill areas will be covered: comprehension, vocabulary, expression, critical analysis, library and study skills. Students will be required to develop minimum computer competencies. Lecture and laboratory approaches are utilized with the emphasis on individualized instruction.

**EDUC 120** Dr. Fusaro
**(Q,W)Applied Statistics** 3 credits
(Prerequisite: WRTG 107) A writing-intensive, quantitative-reasoning course designed to enable students to use statistics to solve problems and to communicate clearly the procedures employed and the results obtained. Students will be required to perform statistical computations and to write as a means of learning the course material and expressing comprehension of it. Topics covered include hypothesis testing, correlation, t-test, and Chi-square test of independence.

**EDUC 121** Dr. Pierce
**The Foundations of Education** 3 credits
This course is designed to examine the characteristics of the public school system in the United States, the role of education in contemporary society, and current issues related to education.

**EDUC 131** Dr. Cantrell
**(D)Experiencing Cultural** 3 credits
**Diversity Through Children's Literature**
A course designed to introduce students to the diversity of cultures represented in children's literature as a way to identify and differentiate the variety of cultures that they may encounter as teachers.

**EDUC 140** Dr. Mbugua
***(D)Early Childhood Education** 3 credits
An introductory overview of the theory, research and practice of early-childhood education. Consideration will be given to the educational process from the fetal stages on through the first three years of life as well as the early years of schooling.

**EDUC 180** Staff
**Field Experience I** 1 credit
(Pre- or co-requisite: EDUC 121) This course prepares for field-experience requirements in EDUC 280 and 380. It focuses on the development of observation and reflective skills through case studies, vignettes and video situations. Application required.

**EDUC 222** Dr. Lo
**Educational Psychology** 3 credits
This course examines the psychological basis of teaching strategies, classroom environment, learning, motivation, reinforcement, and evaluation.

**EDUC 226** Dr. Hobbs
**Secondary, Transitional and** 3 credits
**Vocational Services**
The role of the special-education teacher in designing and implementing transitional and vocational services for the disabled student. Emphasis is placed upon the role of the special-education professional as an advocate for the disabled in accessing school, community, state, and federal resources.

**EDUC 241** Dr. Cantrell
***Foundations of Reading-** 3 credits
**Instruction**
A basic course in reading. It provides an introduction to reading-instruction, reading programs, and the reading process as it relates to language acquisition and learning to read. The readiness, reading skills, techniques and methods which are essential for effective reading will be examined.

*Includes service-learning component

**EDUC 242** Dr. Cozza
***Mathematics Methods for Elementary Teaching** 3 credits
The course provides the Elementary Education major with planning and instructional strategies appropriate for use in the mathematics area of elementary curriculum. An analysis of content will be made in light of the needs of the elementary student and society.

**EDUC 251** Dr. Mbugua
**Development of the Early Learner** 3 credits
This course will be focused on the development of the early learner, birth through age 8. Psychomotor, affective and cognitive development, as well as special-needs children, will be studied. Theory to practice linkages will be stressed. An observation component is part of the course expectation.

**EDUC 252** Dr. Wenze
**Assessment in Early Childhood Education** 3 credits
(Prerequisites: EDUC 140 and 251)This course will be focused on strategies, methods, and instruments for assessing the early learner's development in the cognitive, psychomotor, and affective domains. Theory-to-practice linkages will be stressed. An observation component is part of the course expectation.

**EDUC 258** Dr. Wenze
**Assessment Practicum** 1 credit
(Co-requisite: EDUC 265) Students will obtain hands-on experience in the assessment of special-needs students and adults.

**EDUC 265** Dr. Hobbs
**SPED Educational Assessment** 3 credits
This course will be focused on those stategies, methods, and instruments for assessing the disabled student's development in the cognitive, psychomotor, and affective domains. Theory-to-practice linkages will be stressed. An observation component is part of the course expectation.

**EDUC 267** Dr. Hobbs
**Learning Disabilities** 3 credits
Introduction to learning disabilities. Definitions, current theories, etiological bases, and educational management of students with learning disabilities and/or hyperactivity and attention deficit is emphasized.

**EDUC 280** Staff
**Field Experience II** 1 credit
(Prerequisites: EDUC 121 and 180; pre- or co-requisite: EDUC 222) The course is closely associated with EDUC 121, 222, and 180. Projects will be assigned to be carried out in basic education schools and other agencies through observation, tutoring, and oral/written reports. Completed ACT 34 and Child Abuse History Clearances are required previous to receiving a field assignment. Application required.

**ED/P 306** Staff
**(P)Philosophy of Education** 3 credits
(Formerly ED/P 106) An examination of representative modern systemic philosophies of education with a critical analysis of the answers that each system of philosophy provides to the important questions concerning the nature of knowledge, value, man, and society.

**EDUC 310** Staff
**Special Topics in Education** 1-3 credits
A series of courses dealing with specific educational issues, theories, ideologies, skills, methods, or other designated topics for individual or group study. Course is offered in accord with student need.

**EDUC 312** Staff
**The Secondary School Mathematics Curriculum** 3 credits
(Co-requisite: EDUC 313) This course examines the strategies and content of mathematics curricula in the secondary school and attempts to compare them to major contemporary reform efforts. The course includes a review of secondary-school (junior and senior high school) mathematics.

**EDUC 313** Staff
**General Methods and Planning** 3 credits
(Prerequisite: Education 222; pre- or co-requisite for EDUC 380) Methodology for setting direction in the classroom, creating a learning situation, developing the content, reinforcing and evaluating will be covered. Students will be involved with developing plans for teaching.

**EDUC 314** Staff
***(S,L)Specific Subject Methods** 3 credits
(Prerequisite: EDUC 313) Utilizing knowledge of planning and teaching, students will be guided in the analysis of specific content and techniques for teaching that content. They will demonstrate their ability to carry out plans in "micro" teaching experiences.

**EDUC 340** Dr. Cantrell
**Reading in the Secondary School** 3 credits
This course is the study of the reading process with emphasis placed on understanding and skills needed by secondary school students in their subject fields.

**EDUC 341** Prof. Cannon
**The Education of the Exceptional Child** 3 credits
A general view of the field; historical background – both philosophical and legislative. A survey of physical, mental, and emotional handicaps and of giftedness, along with remedial and preventive practices with a look at the future.

**EDUC 342** Dr. Wiley
**Educational Media and Technology** 3 credits
A course in which students are expected to produce media appropriate for classroom use. The student is also expected to exhibit competency in the use of common education media equipment and the uses of computers. Students will also be introduced to modern and future forms of media technology appropriate for the classroom teacher.

**EDUC 343** Dr. Fusaro
**Evaluation and Measurement** 3 credits
This course acquaints prospective teachers with the various facets of test interpretation and test construction. Standardized achievement, diagnostic, and aptitude tests will be covered, along with teacher-made objective and essay tests. Emphasis will be placed on constructing valid and reliable tests by the teacher. The use and misuse of standardized tests and teacher-made tests will be discussed.

**EDUC 344** Dr. Wiley
**Science Methods for Elementary Teaching** 3 credits
This course is designed to provide the elementary-education major with planning and instructional strategies appropriate for use in the science area of the Elementary curriculum. An analysis of content and methodologies will be made in light of the needs of the elementary school, the elementary student and society.

**EDUC 345** Dr. Lo
**Language Arts Methods** 3 credits
The course is designed to provide the elementary major with a knowledge of the process of a child's language acquisition. Planning for the instructional strategies used in teaching oral/written composition, grammar, listening, speaking, spelling and handwriting skills are examined.

**EDUC 346** Dr. Cozza
**(D)Social-Studies Methods** 3 credits
The course is designed to provide the elementary major with a knowledge of the child's needs in the social sciences and the humanities. Planning for the instructional strategies used in teaching history, geography, and economics are examined.

**EDUC 347** Dr. Montgomery
**Instructional Strategies for Content-Area Reading** 3 credits
The course is designed to introduce students to procedures to teach functional reading skills in the elementary schools. Emphasis will be placed on the specialized vocabularies, concepts and study skills which are considered necessary for the comprehension of reading materials

pertinent to content-area subjects. Various resources and devices will be examined.

**EDUC 351** Dr. Wenze
***Methods Across the ECE Curriculum** 3 credits

This course is designed to explore methods for integrating a primary curriculum to include social-studies content, literature and language arts, as well as the expressive arts. An integrated curriculum which invites children to become involved in a variety of creative activities and learning situations will be stressed.

**EDUC 352** Staff
**ECE Methods in Math/Science/Health** 3 credits

This course will provide the education student with an appropriate knowledge base from which to design instructional sequences which integrate science, health and mathematics concepts for young learners.

**EDUC 353** Staff
**Math/Science/Health for Early Childhood Teaching** 3 credits

(Pre- or co-requisite: EDUC 242 and 344) This course will provide individuals receiving certification in both Elementary and Early Childhood Education with an appropriate knowledge base from which to design instructional sequences which integrate science, health, and mathematics concepts for young learners.

**EDUC 364** Dr. Hobbs
***(D)Inclusionary Classroom Practices** 3 credits

Emphasis will be placed on the special-education teacher as one member of an educational team. Students will receive guidance in supporting the disabled student in a general-education classroom, supporting the general-education teacher in providing instruction for the disabled child, and generally facilitating the acceptance and optimal learning of the disabled student in a general-education environment.

**EDUC 365** Staff
**Professional Seminar** 3 credits

Focuses on the special educator as one team member in a larger professional group which may include administrators, ancillary staff, parents, and other professionals. Students will be closely guided in learning to write IEPs, transitional plans, and school-based grant proposals. Additionally students will receive guidance in constructing a portfolio and in case management. Completed ACT 34 and Child Abuse History Clearances are required previous to receiving a field assignment.

**EDUC 366** Staff
**Emotional/Behavioral Disabilities** 3 credits

A study of the problems associated with emotional and behavioral disabilites in the classroom. Emphasis is placed on behavior management and appropriate learning strategies for inclusionary general-education classes, self contained special-education classes, and in residential placements.

**EDUC 367** Staff
**Designing Curriculum for Elementary Special Education** 3 credits

Emphasis is on the effective design and use of curriculum and materials to educate elementary students with special needs.

**EDUC 368** Staff
**Designing Curriculum for Secondary Special Education** 3 credits

Emphasis is on the effective design and use of curriculum and materials to educate secondary students with special needs.

**EDUC 369** Staff
**Early Assessment and Intervention** 3 credits

This course will focus on the development of the early learner, birth through age eight, along with appropriate assessment and intervention techniques for children falling under the IDEA.

**EDUC 380** Staff
**Field Experience III** 1 credit

(Prerequisites: EDUC 280, 313) This course will be closely associated with the methods courses. An emphasis is placed on studying teaching techniques and with involvement in teacher activities in basic-education schools. Secondary section offered in the fall; Elementary section in the spring.Completed ACT 34 and Child

Abuse History Clearances are required previous to receiving a field assignment. Application required.

**EDUC 440** Prof. Nimerosky
***Elementary Classroom Management and Discipline** 3 credits
In-depth study of the rationale, theories, and techniques for creating a situation where learning can take place and for handling specific individual and group behavior problems in productive ways. Completed ACT 34 and Child Abuse History Clearances are required previous to receiving a field assignment.

**EDUC 441** Staff
**Planning in Elementary Student Teaching** 2 credits
Preparation of actual teaching plans during elementary student teaching. Application required.

**EDUC 442** Staff
**Instruction in Elementary Student Teaching** 3 credits
Involvement in implementing methods and techniques. Elementary-school student teaching on a full-time basis under the supervision of classroom teachers and University supervisors.

**EDUC 443** Staff
**Managing Elementary Classrooms in Student Teaching** 2 credits
Involvement in the management of learning situations during elementary student teaching.

**EDUC 444** Staff
***Professional Growth in Elementary Student Teaching** 3 credits
The demonstration of professional growth during student teaching as evidenced by professional behavior and skills, a commitment to improvement, and ability to relate to others. This will include attendance at and participation in a weekly seminar to analyze and discuss professional considerations and student-teaching problems. Completed ACT 34 and Child Abuse History Clearances are required previous to receiving a field assignment.

**EDUC 451** Staff
**Early-Childhood Education Student Teaching** 5 credits
This course consists of a high-intensity practicum in the early-childhood classroom at a pre-K level. Assignment by the Education Department to an ECE classroom requires completion of an application process. Attendance at weekly seminars is also required. This course must be preceded by or follow Elementary Student Teaching if state certification is being pursued. A grade of "C" or higher is required for endorsement of certification applications. Completed ACT 34 and Child Abuse History Clearances are required previous to receiving a field assignment.

**EDUC 460** Staff
**Classroom Management Discipline for SPED** 3 credits
In-depth study of the rationale, theories, and techniques for creating a situation where learning can take place and for handling specific individual and group behavior problems in productive ways.

**EDUC 461** Staff
**Planning in SPED Student Teaching** 3 credits
Preparation of actual teaching plans during special education student teaching. Application required.

**EDUC 462** Staff
**Instruction in SPED Student Teaching** 3 credits
Involvement in implementing methods and techniques. Special education student teaching on a full-time basis under the supervision of classroom teachers and University supervisors.

**EDUC 463** Staff
**Managing SPED Student Teaching Instruction** 3 credits
Involvement in the management of learning situations during special-education student teaching.

**EDUC 464** Staff
***Professional Growth in Special-Education Student Teaching** 3 credits
The demonstration of professional growth during student teaching as evidenced by professional behavior and skills, a commitment to improvement, and ability to relate to others. This will include attendance at and participation in a weekly seminar to analyze and discuss professional considerations and student-teaching problems. Completed ACT 34 and Child Abuse History Clearances are required previous to receiving a field assignment.

**EDUC 475** Staff
**Secondary Classroom Management and Discipline** 3 credits
In-depth study of the rationale, theories, and techniques for creating a situation where learning can take place and for handling specific individual and group behavior problems in productive ways. Completed ACT 34 and Child Abuse History Clearances are required previous to receiving a field assignment.

**EDUC 476** Staff
**Planning in Secondary Student Teaching** 2 credits
Preparation of actual teaching plans during secondary student teaching. Application required.

**EDUC 477** Staff
**Instruction in Secondary Student Teaching** 3 credits
Involvement in implementing methods and techniques. Secondary student teaching on a full-time basis under the supervision of classroom teachers and University supervisors.

**EDUC 478** Staff
**Managing Classrooms in Secondary Student Teaching** 2 credits
Involvement in the management of learning situations during secondary student teaching.

**EDUC 479** Staff
***Professional Growth in Secondary Student Teaching** 3 credits
The demonstration of professional growth during student teaching as evidenced by professional behavior and skills, a commitment to improvement, and ability to relate to others. This will include attendance and participation in a weekly seminar to analyze and discuss professional considerations and student-teaching problems. Completed ACT 34 and Child Abuse History Clearances are required previous to receiving a field assignment.

The Education Department ordinarily does not permit students to take courses concurrently with the student-teaching sequence. Students seeking deviations from this policy must complete a form requiring the approvals of the advisor, the appropriate program director, the department chairperson, and the dean. Student teaching requires application, which must be submitted to the appropriate advisor and approved by the program director, prior to registration for the student teaching semester. Completed ACT 34 and Child Abuse History Clearance forms are required previous to receiving a field assignment.

Footnotes for Early-Childhood Education, Elementary Education, Secondary Education and Special Education:

[1] Four courses (12 credits) in at least two of the following disciplines are required: History, Literature, Foreign Languages. However, one course in Art or Music History can be used as one of the four courses.

[2] All students take two courses designated as writing intensive and two courses designated as cultural diversity. Where possible, at least one of the writing-intensive courses should be in the major. Cultural-diversity and writing-intensive courses may also fulfill other requirements in the GE curriculum.

[3] These courses must be scheduled in the same semester. EDUC 440-444 or EDUC 475-479 comprise the student teaching semester.

[4] Semesters may be reversed at the discretion of the program director.

Additional note for Early-Childhood and Elementary Education

[5] PHED - 1 credit in Movement and Dance required.

*Includes service-learning component

# EXERCISE SCIENCE AND SPORT

*DR. GARY N. WODDER, Chairperson*

The Department aims to improve the physical-fitness level of each student or improve and increase students' recreational skills through our offerings of over 30 different activity classes. Emphasis is placed on instruction in a wide variety of popular sports and recreational activities, especially those with carry-over value for post-college years.

Every regularly enrolled student except veterans must satisfy the 3-credit Physical Education requirement unless excused by the Department.

It is possible to be excused from the Physical Education classes by application to the Department if (a) a physician certifies that a student, for medical reasons, should not engage in vigorous physical activity; (b) the Department deems it advisable; (c) veterans.

Grading: S—Satisfactory

Grading: U—Unsatisfactory, requiring repetition of course

**Physical Education** .5-1 credit

Students taking physical education may select from the following: tennis, swimming, yoga, skiing, soccer, racquetball, weight training, aerobics, hapkido, volleyball, bowling, running, karate, self-defense for women, judo, advanced life-saving, water-safety instruction, modern jazz dance, golf, tai chi, badminton, wellness and scuba diving. Three credits are needed for graduation.

## COACHING MINOR

The 16½-credit Coaching minor is based on the American Sport Education Program (ASEP) and will help meet the needs of those who wish to coach and work more effectively with young athletes from youth through interscholastic sports.

*Introduction to Coaching*, one credit, is a suggested prerequisite for the 3-credit courses.

| Dept. and No. | Descriptive Title of Course | Credits |
|---|---|---|
| PHED 112 | First Aid/CPR | ½ |
| PHED 160 | Introduction to Coaching | 1 |
| PHED 202 | Sport Adminstration | 3 |
| PHED 208 | Condition and Training for Sport | 3 |
| PHED 203 | Prevention and Care of Sports Injuries | 3 |
| PSYC 284 | Sports Psychology | 3 |
| PHED 205 | Teaching Sport Skills | 3 |
| | | **TOTAL: 16½** |

**PHED 112** Mr. Hair
**First Aid/CPR** .5 credit

This course leads to American Red Cross certification in CPR and First Aid. Prepares students to recognize and respond to respiratory, cardiac, and other emergency situations.

**PHED 160** Team
**Introduction to Coaching** 1 credit

Prerequisite course which will assist prospective coaches as they develop a positive coaching philosophy, apply coaching principles and use sport-management skills.

**PHED 208** Prof. Robertson
**Conditioning and Training for Sports** 3 credits

Students will learn how to design effective, individualized training programs by incorporating training basics such as overload, specificity, adaptation and progression. Will include individual differences among athletes, muscular fitness, energy fitness and performance factors. Formerly PHED 210.

**PHED 202** Dr. Wodder
**Sports Administration** 3 credits
Examines the business of coaching, offering practical approaches to the administrative functions of organizing, planning, leading and controlling. Integrates philosophy and principles into practice.

**PHED 203** Prof. Robertson
**Prevention and Care of Sports Injuries** 3 credits
Will cover sports first aid, prevention of and dealing with sports injuries. Helps coaches become competent first responders in sports emergencies. Students will learn how to recognize and prevent common sports injuries and administer appropriate first aid. Also covers procedures for evaluating and caring for injuries, guidelines for rehabilitation and therapeutic taping.

**PSYC 284** Dr. O'Malley
**Sports Psychology** 3 credits
(Prerequisite: PSYC 110) This course covers a variety of topics in sports psychology including the learning of athletic skills, principles of motivation, goal-setting and reinforcement. The emotional aspects of sports competition and various strategies for mental preparation for completion such as relaxation, concentration, and attentional skills will be discussed.

**PHED 205** Prof. Hair
**Teaching Sports Skills** 3 credits
Students will master the essentials of teaching sports skills and improve their teaching effectiveness. They will learn how to prepare for teaching sports skills, how to introduce, explain, and demonstrate sports skills and use cognitive processes to improve performance.

# EXERCISE SCIENCE

*DR. RONALD W. DEITRICK, Program Director*

Exercise Science is the study of human movement as related to exercise, sport, and physical activity. It is dedicated to promoting and integrating scientific research and education on the effects and benefits of exercise; and, to the delivery of physical-activity programs that prevent disease, facilitate rehabilitation, promote health, and enhance human performance. Exercise Science is part of the field of Sports Medicine which also includes clinical areas of study. The scientific aspects of Sports Medicine include exercise physiology, biochemistry of exercise, and biomechanics. Testing of maximal oxygen consumption, lactic acid metabolism, analysis of muscle fatigue, research on muscle hypertrophy and bone density, measurement of body composition, and benefits of exercise in cardiovascular disease, diabetes and weight control are a few of the many contributions made by exercise scientists to Sports Medicine.

Few academic program majors offer such diverse opportunities after graduation as Exercise Science. The academically rigorous curriculum prepares graduates with knowledge and experience for employment opportunities in a variety of settings. In the applied health area, careers in corporate and community/hospital-based wellness programs, cardiopulmonary rehabilitation, and research centers investigating the benefits of exercise in spinal-cord injury are possibilities. Sports physiologist and strength and conditioning specialists for sports teams are also career options.

Exercise Science is an excellent option for students interested in applying to graduate health-profession programs such as osteopathic medicine, physical therapy, physician assistant, and clinical exercise physiology. Additional required coursework to meet entry requirements can be chosen as electives. In this regard, students should make their career intentions known early in their program of study. Opportunities for graduate study are available in academic units of medicine, biology, physiology, and exercise science. Although not required, completion of the program provides students with the ability to take different certification exams offered by several professional organizations including the American College of Sports Medicine.

In order to graduate, Exercise Science majors must maintain an overall 2.5 grade-point average in major courses. Students receiving a grade less than C minus in any major course must repeat the course and earn a C minus or better grade in that course. Completion of the service learning requirements (20 hours per academic year) of the College of Professional Studies is also a requirement for graduation.

# EXERCISE SCIENCE

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **SPRING** |
| COGNATE | BIOL 110-111 | Structure & Function of Human Body | 4 | 4 |
| GE NSCI | CHEM 112-113 | General & Analytical Chemistry | 4½ | 4½ |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE FSEM | INTD 100 | *Freshman Seminar | 1 | |
| MAJOR | PHED 106 | Aerobic Fitness | 1 | |
| GE/IL | C/IL 102/102L | Computing and Information Literacy | | 3 |
| MAJOR | EXSC 210 | Sports Physiology | | 3 |
| GE QUAN | MATH 114 | Analysis I | 4 | |
| | | | **17½** | **17½** |
| | | **SECOND YEAR** | | |
| COGNATE | BIOL 245 | General Physiology | | 4½ |
| COGNATE | NURS 100 | Family Health | 3 | |
| GE HUMN | HUMN ELECT | Humanities Elective | | 3 |
| MAJOR | EXSC 212 | *Nutrition in Exercise and Sport | 3 | |
| GE PHIL - T/RS | PHIL 120 - T/RS 121 | Intro. to Philosophy-Theology I | 3 | 3 |
| COGNATE | PHYS 120-121 | General Physics | 4 | 4 |
| GE HUMN (D) | HUMN ELEC (D) | Humanities Elective (Cultural Diversity) | 3 | |
| MAJOR | PHED 105 | Cardio. Fitness | 1 | |
| MAJOR | PHED 112 | First Aid/CPR | ½ | |
| GE S/BH | PSYC 110 | Fundamental of Psychology | | 3 |
| | | | **17½** | **17½** |
| | | **THIRD YEAR** | | |
| MAJOR | PHED 203 | Prevention & Care of Ath. Injuries | 3 | |
| MAJOR | EXSC 312 | *Kinesiology/Biomechanics of Movement | 3 | |
| MAJOR | EXSC 380 | *Internship in Exercise Science | | 3 |
| COGNATE | EDUC 120 | Applied Statistics | 3 | |
| MAJOR | BIOL 347 | Exercise Physiology | | 3 |
| GE T/RS or PHIL | T/RS or PHIL | Elective | 3 | |
| MAJOR | PHED 101 | Weight Training | | 1 |
| GE T/RS or PHIL | PHIL 210-T/RS 122 | Ethics-Theology II | 3 | 3 |
| GE ELECT | ELECT | Free Elective (Diversity) | 3 | |
| COGNATE | BIOL 348 or BIOL 446 | Neurophysiology or Cardiovascular Physiology | | 3 |
| GE ELECT | ELECT | Free Elective | | 3 |
| | | | **18** | **16** |
| | | **FOURTH YEAR** | | |
| MAJOR | EXSC 408 | Clinical Exercise Physiology | | 3 |
| COGNATE | SOC 216 | Medical Sociology | 3 | |
| GE S/BH | PSYC 222 | Adulthood and Aging | | 3 |
| MAJOR | PSYC 284 | Sports Psychology | 3 | |
| MAJOR | EXSC 410 | *Ex. Testing/Programming for Health and Performance | | 3 |
| MAJOR | EXSC 493 | Research Methods in Exercise Science | 3 | |
| GE HUMN | HUMN ELECT | Elective | 3 | |
| GE ELECT | ELECT | Free Electives | | 3 |
| MAJOR | EXSC 412 | *Current Topics in Ex. Science & Sport Medicine | 3 | |
| GE HUMN | ELECT | Humanities Elective | | 3 |
| MAJOR | ELECT | See Exsc Program Director | 3 | |
| | | | **18** | **15** |
| | | | **Total: 137 CREDITS** | |

*Includes service-learning component

**EXSC 210** Dr. Deitrick
**Sports Physiology** 3 credits
(Prerequisite: BIOL 110) This course explores the physiological principles and systems underlying sport performance - aerobic and anaerobic energy, oxygen transport, and muscular and cardiovascular systems. Students will learn how to apply the principles to improve human performance.

**EXSC 212** Dr. Deitrick
***Nutrition in Exercise and Sport** 3 credits
(Prerequisite: EXSC 210 and/or BIOL 347, CHEM 112-113 or by permission of instructor) Role of nutrients in optimizing human performance. Consideration of caloric and nutrient exercise requirements, gender specific needs, weight loss/eating disorders, and nutritional ergogenic aids.

**EXSC 312** Dr. Deitrick
***Kinesiology and Biomechanics of Human Movement** 3 credits
(Prerequisite: BIOL 110-111 and PHYS 120-121) Description of human movement via location and kinesiological action of skeletal muscles, and analysis of motion using kinematic and kinetic biomechanical principles.

**EXSC 380** Dr. Deitrick
**Internship in Exercise Science** 3 credits
(Prerequiste: Exercise Science majors only) The application of Exercise Science principles, knowledge and skills in a supervised setting. Depending on career interests, students can select from a variety of interest including sites located outside of the Northeast region.

**EXSC 408** Dr. Dietrick
**Clinical Exercise Physiology** 3 credits
(Prerequisite: EXSC 210 and/or BIOL 347 or by permission of instructor) This course covers exercise response and adaptation in a variety of chronic lifestyle diseases and the use of exercise tolerance assessment to improve and optimize quality of life.

**EXSC 410** Dr. Deitrick
***Exercise Testing/ Programming for Health and Performance** 3 credits
(Prerequisite: EXSC 210 and/or BIOL 347, major in EXSC or by permission of instructor) Provides knowledge related to Graded Exercise Testing and counseling including purposes, basic exercise ECG, energy costs of exercise, principles of exercise prescription, special populations, and case study.

**EXSC 412** Dr. Deitrick
**Current Topics in Exercise Science and Sports Medicine** 3 credits
(Prerequisite: EXSC 210 and/or BIOL 347 or by permission of instructor) Current topics in the field affecting health and human performance including ergogenics, exercise benefits in chronic disease states, clinical exercise physiology, and age/gender issues.

**EXSC 414** Dr. Deitrick
**Research Methods in Exercise Science** 3 credits
(Prerequisite: Fourth year standing in EXSC) Designed for the student to study and gain experience in research related to the field of Exercise Science. The nature of research, methods for acquiring, analyzing, and publishing/presenting research relevant to Exercise Science.

*Includes service-learning component

# HEALTH ADMINISTRATION AND HUMAN RESOURCES

*DR. PETER C. OLDEN, Chairperson*
*DR. MARY HELEN Mc SWEENEY, Director of Health Administration*

The Health Administration curriculum is designed to develop in students the values, knowledge and skills necessary to enter the growing field of health administration. The sequence of courses includes a significant integration of the fields of health and business administration and includes a minor in business administration. The curriculum is interdisciplinary and provides the student with a broad base of knowledge for securing entry-level positions with public and private agencies in positions concerned with the administration of preventive and remedial health, welfare, and rehabilitative services. A three-credit, 138-hour internship is required with a second three-credit internship available as an elective. Students must provide their own transportation on internships.

In order to graduate, Health Administration majors must have a 2.5 grade-point average (GPA) in major courses, and earn a minimum grade of C or better in their cognate courses. A service-learning component is integrated into one health administration course during each undergraduate semester, with a minimum of 10 service hours required per semester. Dexter Hanley College students will meet the service-learning requirement by completing major courses that have a service-learning component. They will not be required to complete additional service-learning hours.

The Health Administration program has full membership status in the Association of Undergraduate Programs in Health Administration (AUPHA), 1110 Vermont Avenue NW, Suite 220, Washington, DC 20005-3500, (202) 822-8550.

**MINOR:** A minor in Health Administration requires 18 credits distributed as follows: HADM 111, 112, 312 and 313, and any other two HADM courses.

**HADM 111** Staff
**Introduction to** 3 credits
**Health Administration**
An initial overview of health care in the United States and the professions involved. Emphasis is placed on health-care providers and professionals in health-service settings. A 10-hour service-learning component is integrated into this course.

**HADM 112** Staff
***Health Systems** 3 credits
The nature and organization of health care in the United States. Factors affecting the delivery of such services are identified to provide an understanding of the evolution and dynamics of health-care systems as well as prospects for future development. A 10-hour service-learning component is integrated into this course.

**HADM211** Staff
***(W)Health Administration** 3 credits
Roles and functions of supervisory and administrative structure, including boards of directors in health agencies, systems and organizations, with an emphasis on managed-care environments. A 10-hour service-learning component is integrated into this course.

**HADM 212** Staff
**Health-Administration Law** 3 credits
The legal and regulatory environment of health care and the administration of health services.

**HADM 213** Staff
**Supervising Health Personnel** 3 credits
Principles and practices of direct supervision of personnel including motivation, leadership and various personnel functions in health-care settings. For Health Administration majors and minors only.

**HADM 284** Staff
**Special Topics** 3 credits
Selected topics of current interest in health administration are offered on a variable basis.

# HEALTH ADMINISTRATION

| | Dept. and No. | Descriptive Title of Course | Credits | |
|---|---|---|---|---|
| | | **FRESHMAN YEAR** | **FALL** | **SPRING** |
| MAJOR | HADM 111 | Introduction to Health Administration | 3 | |
| MAJOR | HADM 112 | *Health Systems | | 3 |
| GE FSEM | INTD 100 | *Freshman Seminar | 1 | |
| GE SPCH | COMM 100 | Public Speaking | | 3 |
| GE PHIL | PHIL 120 | Introduction to Philosophy | | 3 |
| GE WRTG | WRTG 107 | Composition | 3 | |
| GE C/IL | C/IL 104 | Computing and Information Literacy for Business | | 3 |
| GE T/RS | T/RS 121 | Theology I | 3 | |
| GE NSCI | -- | -- | 3 | |
| GE QUAN | PSYC 210 | Psychological Statistics | 3 | |
| GE S/BH | ECO 101 | Current Economic Issues | | 3 |
| GE HUMN | -- | -- | | 3 |
| | | | **16** | **18** |
| | | **SOPHOMORE YEAR** | | |
| MAJOR | HADM 293/w | *Research in Health Administration | 3 | |
| MAJOR | HADM 211/w | *Health Administration | | 3 |
| MAJOR | HADM 212 | Health Administration Law | | 3 |
| GE PHIL | PHIL 210 | Ethics | 3 | |
| GE T/RS | T/RS 122 | Theology II | | 3 |
| COGNATE | ACC 253 | Financial Accounting | 3 | |
| COGNATE | FIN 351 | Introduction to Finance | | 3 |
| GE NSCI | -- | -- | 3 | |
| GE HUMN | -- | -- | 3 | 3 |
| GE PHED | -- | -- | 1 | 1 |
| | | | **16** | **16** |
| | | **JUNIOR YEAR** | | |
| MAJOR | HADM 312 | *Health Finance | 3 | |
| MAJOR | HADM | Elective | 3 | 3 |
| MAJOR | HADM 340 | Career Seminar | 1 | |
| MAJOR | HADM 380 | *Internship in Health Administration | | 3 |
| COGNATE | MGT 351 | Principles of Management I | 3 | |
| COGNATE | MGT 352 | Principles of Management II | | 3 |
| COGNATE | MKT 351 | Introduction to Marketing | | 3 |
| COGNATE | | Cognative Elective | | 3 |
| GE PHIL | PHIL 212 | Medical Ethics | 3 | |
| GE HUMN | -- | | 3 | |
| GE FREE | -- | | | 3 |
| | | | **16** | **18** |
| | | **SENIOR YEAR** | | |
| MAJOR | HADM 441 | *Issues in Health Administration | | 3 |
| MAJOR | HADM | Elective | 3 | |
| MAJOR | HADM 315/d | *Cultural Diversity | 3 | |
| COGNATE | -- | Electives | | 3 |
| GE HUMN | -- | -- | 3 | |
| GE S/BH | -- | -- | 3 | |
| GE PHED | -- | -- | 1 | 3 |
| GE Free | -- | -- | 3 | 6 |
| | | | **16** | **15** |
| | | | | **Total: 131 CREDITS** |

*Service-learning component included
w-writing
d-diversity

# HEALTH ADMINISTRATION

**Concentration in Long-Term-Care Administration**

Students seeking a career in long-term-care administration can select a sequence of courses in Health Administration, Business, and Gerontology, including a 1040 clock-hour HADM internship. Upon successful completion of the curriculum, students will have met the educational requirements of the Pennsylvania State Board of Licensure for Nursing Home Administrators and be eligible to take the state licensure examination for long-term-care administrator. The Health Administration curriculum forms the infrastructure for the LTCA concentration. It includes 40 credits of HADM courses, continues the 21-credit Business minor and features 12 credits of Gerontology courses. A service-learning component is integrated into one required course per semester, with a minimum of 10 service hours required per semester. The HADM/LTCA track increases the credits for the Health Administration degree from 131 for the regular HADM major to 134. Students may also earn a second minor, in Gerontology, by taking Soc 110 and Gero 230.

The HADM/LTCA program has the approval of the National Association of Board of Examiners of Long-Term Care Administrators, Inc. (NAB), 808 17th Street NW, Suite 200, Washington, DC 20006-3910, (202) 223-9750

**HADM 293** Staff
***(W)Research in Health Administration** 3 credits
(Majors only; prerequisite: PSYC 210) Principles and processes of research in health administration including literature, review, research design, data-collection techniques, statistical analysis and professional writing in generating new knowledge and in using research in administration. A 10-hour service-learning component is integrated into this course.

**HADM 312** Staff
***Health Finance** 3 credits
(Prerequisite: ACC 253 or 254 or permission of instructor) The cost of health care in society with emphasis on financial concepts and reimbursement mechanisms for health providers. A 10-hour service-learning component is integrated into this course.

**HADM 314** Staff
**Health Care Policy** 3 credits
(HADM juniors and seniors only) Public policy in the health care sector is studied, including the policy-making process. Implications of governmental policies for health-care organizations and administrators are discussed.

**HADM 315** Staff
***(D)Cultural Diversity and Health Administration** 3 credits
Focuses on the effects of cultural diversity on health-care administration. Emphasis is placed on the importance of assessing and addressing the health care needs of various cultural groups within a given health-care service area. For HADM majors and HADM minors only. A 10-hour service-learning component is integrated into this course.

**HADM 316** Staff
**Health Care Marketing** 3 credits
Marketing theories, concepts, strategies, methods and techniques are studied and applied to health care. The unique aspects of health-care services and health-care organizations are considered as they pertain to marketing.

**HADM 317** Staff
**Work-force Development** 3 credits
Training and development of employees within various health-care delivery systems will be examined. Adult learning theories and the role of the training function will be critically reviewed. An in-depth study and application of the training process will require students to design, develop, implement and evaluate a training program.

# HEALTH ADMINISTRATION
## Concentration in Long-Term-Care Administration

| | Dept. and No. | Descriptive Title of Course | Credits FALL | Credits SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| MAJOR | HADM 111 | Introduction to Health Administration | 3 | |
| MAJOR | HADM 112 | *Health Systems | | 3 |
| GE FSEM | INTD 100 | *Freshman Seminar | 1 | |
| GE PHIL | PHIL 120 | Introduction to Philosophy | | 3 |
| GE SPCH | COMM 100 | Public Speaking | | 3 |
| GE WRTG | WRTG 107 | Composition | 3 | |
| GE C/IL | C/IL 104 | Computing and Information Literacy for Business | | 3 |
| GE T/RS | T/RS 121 | Theology I | 3 | |
| GE NSCI | -- | -- | | 3 |
| GE QUAN | PSYC 210 | Psychological Statistics | 3 | |
| GE S/BH | GERO 110 | Introduction to Gerontology | 3 | |
| COGNATE | GERO 216 | Aging and Community | | 3 |
| | | | **16** | **18** |
| | | **SECOND YEAR** | | |
| MAJOR | HADM 293/w | *Research in Health Administration | 3 | |
| MAJOR | HADM 211/w | *Health Administration | | 3 |
| MAJOR | HADM 212 | Health Administration Law | 3 | |
| MAJOR | HADM 213 | Supervising Health Personnel | 3 | |
| COGNATE | GERO 218 | Health and Aging | 3 | |
| GE PHIL | PHIL 210 | Ethics | 3 | |
| GE T/RS | T/RS 122 | Theology II | | 3 |
| COGNATE | ACC 253 | Financial Accounting | 3 | |
| COGNATE | FIN 351 | Introduction to Finance | | 3 |
| GE NSCI | -- | -- | | 3 |
| GE S/BH | ECO 101 | Current Economic Issue | | 3 |
| GE COGNATE | GERO 232 | Aging and Death | | 3 |
| | | | **18** | **18** |
| | | **THIRD YEAR** | | |
| MAJOR | HADM 312 | *Health Finance | 3 | |
| MAJOR | HADM | Elective | 3 | 3 |
| MAJOR | HADM 340 | Career Seminar | 1 | |
| MAJOR | HADM 318 | *Long-Term Care Administration | 3 | |
| COGNATE | MGT 351 | Principles of Management I | 3 | |
| COGNATE | MGT 352 | Principles of Management II | | 3 |
| COGNATE | MKT 351 | Introduction to Marketing | | 3 |
| COGNATE | | Cognative Elective | | 3 |
| GE PHIL | PHIL 212 | Medical Ethics | 3 | |
| GE HUMN | -- | | | 3 |
| GE PHED | | | 1 | |
| GE FREE | -- | | | 3 |
| | | | **17** | **18** |
| | | **FOURTH YEAR** | | |
| MAJOR | HADM 441 | *Issues in Health Administration | | 3 |
| MAJOR | HADM 480 | *Internship in LTC Administration | 6 | 6 |
| GE HUMN | -- | -- | 6 | 3 |
| GE PHED | -- | -- | 1 | 1 |
| GE ELECT | ELECT | Elective | | 3 |
| | | | **13** | **16** |
| | | | **Total: 134 CREDITS** | |

*service-learning component included

**HADM 318** Staff
***Long-Term-Care Administration** 3 credits
Designed to introduce the student to Long-Term-Care (LTC) facility administration. Emphasis is placed on the differences between acute and long-term levels of care, types of LTC facilities and special concerns involving the LTC resident. A 10-hour service-learning component is integrated into this course.

**HADM 340** Staff
**Career Seminar** 1 credit
(Majors only) Seminar in which students appraise their present status and develop specific written educational and career plans for future course work, career entry and/or graduate school.

**HADM 380** Staff
***Internship in** 3 credits
**Health Administration**
(Prerequisites: HADM 340, 18 HADM credits or approval of program director) The internship, a significant educational experience, ends the third year and involves a supervised practical experience in a community agency/organization providing health services. It provides both practical experience and an opportunity to integrate knowledge into a working professional philosophy. Students will spend a minimum of 120 hours in the field and a minimum of 18 hours in on-campus staffing sessions. Prerequisite for HADM 481. Students must provide their own transportation. Graded Satisfactory or Unsatisfactory.A 10-hour service-learning component is integrated into this course.

**HADM 441** Staff
***Issues in Health-Care** 3 credits
**Administration**
Seniors only. A capstone course in which students demonstrate knowledge attained throughout the HADM curriculum as well as the ability to apply that knowledge in a practical manner through completion of a "mega case study", utilizing a small administrative group/team approach.

**HADM 480** Staff
***Internship in** 12 credits
**Long-Term Care Administration**
(Prerequisite: approval of HADM director) The internship is a significant educational capstone experience that involves a supervised practical experience in a licensed long-term care facility. It provides both a practical experience in the student's field and an opportunity to integrate knowledge from a variety of courses into a working professional philosophy. Students will spend 520 hours in the field placement and 15 hours of on-campus seminars. Students must accumulate 1040 hours of internship experience by taking HADM 480 in both the fall and spring semesters of their senior year. Students must provide their own transportation. Graded Satisfactory or Unsatisfactory.

**HADM 481** Staff
***Internship in** 3 credits
**Health Administration**
(Prerequisite: HADM 380)
This second internship involves 150 hours in a community agency or organization providing health services; it may be taken during any regular academic term and may be completed outside the immediate University region. Approval by program director is required. Students must provide their own transportation. Graded Satisfactory or Unsatisfactory.

# HUMAN RESOURCES STUDIES

*DR. PETER C. OLDEN, Chairperson*
*WILLIAM G. WALLICK, Director of Human Resources Studies*

The Human Resources Studies (HRS) major is rooted in the Jesuit liberal arts tradition and prepares students to be proactive in their pursuit of fairness and equity within the workplace. Human Resources professionals work within all industries and are concerned with recruiting, developing, and retaining a productive workforce. The program is designed to educate students in the processes used to promote effective performance, development, and job satisfaction of employees. This programmatic focus is based upon the belief that a strong analytical knowledge base is critical to the successful practice of human resources. Students are actively engaged in the application of theories and how those applications can influence the effectiveness of organizations. The study of human-resources theories and their application is a definitive mark of the program.

Students are exposed to an interdisciplinary curriculum, which requires the integration of knowledge from the liberal arts, social and behavioral science, and business. The HRS degree includes a required minor in general business but is also uniquely designed to offer students an additional minor in psychology or other academic areas. The changing nature of work, as influenced by social, economic, technological, and educational forces is explored, both nationally and globally. Students will develop excellence in both written and oral expression, and the effective utilization of technology. All HRS majors are required to develop a portfolio documenting their specific talents and achievements throughout their undergraduate study.

The Human Resources Studies program leads to a Bachelor of Science degree that prepares students for graduate studies or for entry-level positions in the field of Human Resources (HR) following graduation. The HRS degree consists of a 131-credit curriculum including 40 credits from HRS major courses. In addition to the University of Scranton's requirements for graduation, students receiving the HRS degree must have at least a 2.5 GPA in all major courses and a 2.0 GPA or better in their cognate courses.

An internship is required for all Human Resources Studies majors that prepares students to enter jobs such as recruiter, trainer, compensation analyst, benefits specialist, human-resources generalist, and business manager. A three-credit internship consists of at least 120 hours of professional-level field experience at an approved location and under the guidance of a qualified site supervisor. An additional eighteen hours of on-campus meetings and consultation with an assigned faculty member is required. Students will produce a final project, reflective journal, and outcomes for their portfolios.

The study of the international dimensions of HR is embedded within many courses and the program strongly encourages its majors to participate in some form of international study. This can range from one course to an entire semester or summer abroad. Specific cooperative arrangements with selected institutions ensure that courses are comparable and acceptable to the University of Scranton's academic requirements. Students participating in international study must follow the University of Scranton's requirements for study abroad.

A service-learning component is integrated into selected HRS courses and at least ten hours of a service-learning experience is required during each semester or twenty hours during each academic year. Service-learning exposes students to a wide variety of workplace settings. Service learning experiences enhance student learning and development by affording students the opportunity to make meaningful contributions to their communities. Other benefits include a better comprehension of course content that helps to integrate theory with practice, a deeper understanding of the unique causes of social problems, an increase in cognitive, personal, and spiritual growth, and a heightening of one's sense of social responsibility.

Interested and qualified students have the opportunity to earn both a Bachelor of Science degree in Human Resources Studies and a Master's Degree in Human Resources Administration. Qualified students are encouraged to apply as early as the beginning of their junior year. With careful planning the combined B.S./M.S. degree can be completed within five academic years.

# HUMAN RESOURCES STUDIES

| | Dept. and No. | Descriptive Title of Course | Credits FALL | Credits SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| MAJOR | HRS 111 | *Macro Human Resources | 3 | |
| MAJOR | HRS 112 | Micro Human Resources | | 3 |
| GE S/BH | PSYC 110 | Fundamentals of Psychology | 3 | |
| GE FSEM | INTD 100 | *Freshman Seminar | 1 | |
| GE PHIL | PHIL 120 | Introduction to Philosophy | | 3 |
| GE SPCH | COMM 100 | Public Speaking | | 3 |
| GE WRTG | WRTG 107 | Composition | | 3 |
| GE C/IL | C/IL 104 | Computing and Information Literacy | 3 | |
| GE T/RS | T/RS 121 | Theology I | 3 | |
| GE NSCI | NSCI ELECT | Free Elective | | 3 |
| QE QUANT | PSYC 210 | Statistics in the Behavorial Sciences | | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| | | | **17** | **16** |
| | | **SECOND YEAR** | | |
| MAJOR | HRS 251 | Performance Appraisal | | 3 |
| MAJOR | HRS 252 | *Workforce Education and Training | 3 | |
| MAJOR | HRS 293 | Research Applications in HR | | 3 |
| COGNATE | ACC 253 | Financial Accounting | 3 | |
| COGNATE | PSYC 335 | Psychological Testing | | 3 |
| GE S/BH | ECO 101 | Current Economic Issues | 3 | |
| GE PHIL | PHIL 210 | Ethics | 3 | |
| GE PHIL-T/RS | PHIL or T/RS | Free Elective | | 3 |
| GE T/RS | T/RS 122 | Theology II | | 3 |
| GE NSCI | NSCI ELECT | Free Elective | | 3 |
| GE HUMN | HUMN ELECT | Free Elective | 3 | |
| GE PHED | PHED ELECT | Physical Education | 1 | |
| | | | **16** | **18** |
| | | **THIRD YEAR** | | |
| MAJOR | HRS 340 | Compensation and Benefits | | 3 |
| MAJOR | HRS 351 | *Recruitment, Selection and Staffing | 3 | |
| MAJOR | HRS 353 | HR Information Systems | 3 | |
| MAJOR | HRS 380 | Career Seminar | | 1 |
| MAJOR | HRS ELECT | HRS Elective | 3 | |
| COGNATE | MGT 351 | Principles of Management I | 3 | |
| COGNATE | FIN 351 | Introduction to Finance | | 3 |
| COGNATE | ECO 351 | Environment of International Business | 3 | |
| COGNATE | MKT 351 | Introduction of Marketing | | 3 |
| COGNATE | COGNATE ELECT | Free Elective | 3 | |
| GE HUMN | HUMN ELECT | Free Elective | | 3 |
| GE ELECT | ELECT | Free Elective | | 3 |
| | | | **18** | **16** |
| | | **FOURTH YEAR** | | |
| MAJOR | HRS 440 | Internship | 3 | |
| MAJOR | HRS 480 | *Leadership Seminar | | 3 |
| MAJOR | HRS ELECT | HRS Elective | 3 | |
| COGNATE | OIM 471 | Business Information Management | 3 | |
| COGNATE | COGNATE ELECT | Free Elective | 3 | |
| GE HUMN | HUMN ELECT | Free Electives | | 3 |
| GE ELECT | ELECT | Free Electives | | 9 |
| | | | **15** | **15** |
| | | | | **Total: 131 CREDITS** |

*Includes service-learning component

**MINOR:** To minor in Human Resources Studies the student must take a minimum of 18 credits. Five courses are required: HRS 111, 112, 251, 252, and 340 plus one HRS elective.

**HRS 111** Staff
***Macro Human Resources** 3 credits
A multidisciplinary study of the impact that society, the economy, and the laws has on the history of work. Distinctive trends within various occupations will also be reviewed including the influence of labor unions. Both national and international perspectives will be incorporated into the course. A 10-hour service learning component is integrated into this course.

**HRS 112** Staff
**Micro Human Resources** 3 credits
An introduction to organizational systems that serve as the primary means in which the various human-resources functions are delivered. The theoretical foundations that support organizational systems and human-resources functions will be examined.

**HRS 251** Staff
**Performance Appraisal** 3 credits
The performance review and evaluation process will be studied including the design and implementation of performance appraisal systems. Various theories and models associated with effective performance systems will be reviewed.

**HRS 252** Staff
***Workforce Education and Training** 3 credits
[Cross-listed with HADM 317] The various organizational approaches to developing the skills and competencies of employees will be studied. Specific attention will be given to the assessment, design, development, implementation, and evaluation of training. A service learning component is integrated into this course.

**HRS 284** Staff
**Special Topics** 3 credits
Selected topics in human resources are offered on a variable basis.

**HRS 293** Staff
**Research Applications in Human Resources** 3 credits
(Prerequisite: PSYC 210 - Statistics in the Behavorial Sciences) An introduction to research methodology as applied to human resources issues and problems. Specific attention is given to descriptive, experimental, and quasi-experimental research methods.

**HRS 340** Staff
**Compensation and Benefits** 3 credits
Both direct and indirect forms of compensation, as a component of organizational reward systems, will be studied including associated legal requirements. Ways of ensuring internal and external equity will be reviewed. A focus on job evaluation, salary surveys, health care benefits, insurance and pension will be included.

**HRS 351** Staff
***Recruitment, Selection and Staffing** 3 credits
(Prerequisite: PSYC 335 - Psychological Testing) The specific requirements that support effective identification and evaluation of prospective job candidates will be studied. Relevant legal requirements, testing procedures, and techniques for interviewing and screening will be reviewed. A service learning component is integrated into this course.

**HRS 353** Staff
**HR Information Systems** 3 credits
(Prerequisite: PSYC 210 - Statistics in the Behavorial Sciences) Students will be introduced to various computer software applications, specific to the human resources field. Applications will require students to utilize spreadsheet, database, and statistical analysis tools.

**HRS 380** Staff
**Human Resources** 1 credit
**Career Seminar**
Survey of current trends and occupations in Human Resources. Advanced planning for the required internship experience. Students will further develop their personal portfolio and critically reflect upon past learning experiences and future career plans.

**HRS 390** Staff
**Directed Study** 3 credits
(Departmental permission required)
Students pursue independent study on a specific topic or participate in a research project.

**HRS 440** Staff
**Human Resources Internship** 3 credits
(Prerequisite: HRS 380 - Human Resources Career Seminar) The internship is a significant professional and educational experience that ends the third year of academic study and involves a supervised human-resources experience within an approved organizational setting. At least 120 hours of time must be at the selected organization and an additional 18 hours of an on-campus, faculty-led seminar. A final project and reflective journal will be required. A second internship will be made available for interested students.

**HRS 480** Staff
***Human Resources** 3 credits
**Leadership Seminar**
In this capstone course of the senior year, students will assess and develop their leadership skills and participate in an in-depth case study or simulation that integrates previous learning. An oral and written presentation will be required.

# NURSING

*DR. PATRICIA HARRINGTON, Chairperson*

The purpose of the baccalaureate nursing program is the preparation of qualified persons for entry-level practice of professional nursing in hospitals and community health settings. The program also provides the academic foundations for advanced study in nursing.

High school graduates are admitted as freshmen into the program which leads to a Bachelor of Science degree with a major in Nursing. Total class enrollment is limited in consideration of educational and clinical resources. The curriculum can be completed in eight regular semesters of full-time study or four academic years.

The nursing program has the full approval of the Pennsylvania State Board of Nursing. The curriculum is based on a planned progression of courses so as to develop and build upon knowledge and skills at levels of increasing competency. Therefore, all required courses must be taken in sequence. For progression through the Nursing program, a minimum average grade of C must be attained in the prerequisite Natural-Science courses (BIOL 110-111, CHEM 110-111, BIOL 210). A minimum grade of C must be attained in the prerequisite Quantitative course, PSYC 210, and in each Nursing course.

**Final Grade For Nursing Courses With Concurrent Clinical Laboratory:** The clinical laboratory component of a Nursing course shall be on the basis of S, Satisfactory (Pass), or U, Unsatisfactory (Fail). If the student obtains an S in the clinical laboratory, the final grade in the course, which is entered on the permanent transcript, shall be the grade assigned for the lecture portion of the course. If the student does not obtain an S in the clinical laboratory, the final grade in the course, which is entered on the permanent transcript, shall be an F, no matter what grade was assigned for the lecture portion of the course. Both lecture and clinical components must be repeated if a grade of C-, D+, D or F is obtained in a Nursing course.

Prior to the junior and senior year, students enrolled in the Nursing program must present a certificate as evidence of having completed the Cardiopulmonary Resuscitation Basic Life Support course or Modular course offered by the American Red Cross or the American Heart Association. In order to graduate, Nursing majors are required to complete a minimum of 20 hours of community service during each academic year. Dexter Hanley College students will meet the service learning requirement by completing major courses that have a service-learning component. They will not be required to complete additional service-learning hours.

In addition to the general University tuition and fees listed in the Student Expenses section, students majoring in Nursing assume the responsibility for the following: uniforms and other required clinical accessories, yearly physical examinations, entrance eye and dental examinations, immunizations, comprehensive achievement tests, liability insurance and any travel expenses incurred. Students must also provide their own transportation to and from agencies utilized for clinical laboratories, and have access to a car during their community-health clinical experiences in the senior year. Senior status in the Nursing Program is defined as completion of at least 100 credits including cognate and prerequisite courses for NURS 450 and NURS 452.

Applicants and students should be aware that Pennsylvania law prohibits licensure of individuals convicted of felonies related to controlled substance and may prohibit licensure if there is a conviction for any felonious act. For details, see the Admissions Brochure and the Student Handbook of the Department of Nursing.

Upon graduation the students will be eligible for admission to the examination for the registered-nurse licensure. The University of Scranton's Nursing program is accredited by

the National League for Nursing Accediting Commission.

The Department of Nursing also offers a flexible program for registered nurses interested in returning to school to complete a bachelor's degree in nursing. An accelerated track is offered for students interested in pursuing graduate education and who meet the admission criteria for this option. For BS requirements, please see Dexter Hanley College section.

## NURSING

| | Dept. and No. | Descriptive Title of Course | Credits FALL | SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| MAJOR | NURS 140[2] | Introduction to Nursing Concepts | | 3 |
| COGNATE (GE NSCI) | CHEM 110-111 | Introduction to Chemistry | 3 | 3 |
| COGNATE (GE NSCI) | BIOL 110-111 | Structure & Function | 4 | 4 |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | | 3 |
| GE PHIL | PHIL 120 | Introduction to Philosophy | 3 | |
| GE S/BH | PSYC 110 | Fundamentals of Psychology | 3 | |
| FSEM | INTD 100 | Freshman Seminar | 1 | |
| GE PHED | PHED ELECT | Physical Education | | 1 |
| | | | **17** | **17** |
| | | **SECOND YEAR** | | |
| MAJOR | NURS 250 | Physical Assessment /Health Patterns | 3 | |
| MAJOR | NURS 251 | Nursing Related to the Health Patterns | | 4 |
| COGNATE | | Nutrition | | 2 |
| MAJOR | NURS 262 | Pharmacology I | | 1 |
| COGNATE | BIOL 210 | Introductory Medical Microbiology | 3 | |
| COGNATE (GE QUAN) | PSYC 210 | Psychological Statistics | | 3 |
| GE PHIL-T/RS | PHIL 210-T/RS 122 | Ethics-Theology II | 3 | 3 |
| GE T/RS | T/RS 121 | Theology I | 3 | |
| GE HUMN | HUMN ELECT | Humanities Electives | 6 | |
| GE S/BH | PSYC 225[4] | Abnormal Psychology | | 3 |
| | | | **18** | **16** |
| | | **THIRD YEAR** | | |
| MAJOR | NURS 350-371 | Nursing Care of the Adult I, II | 5.5 | 5.5 |
| MAJOR | NURS 352 | Mental Health Nursing | 5.5 | |
| MAJOR | NURS 373 | Nursing Care of the Childbearing Family | | 5 |
| MAJOR | NURS 360-361 | Pharmacology II, III | 1 | 1 |
| GE PHIL | PHIL 212[4] | Medical Ethics | 3 | |
| GE ELECT | PSYC 221[4]-ELECT | Childhood and Adolescence-Elective | 3 | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | | 3 |
| | | | **18** | **17.5** |
| | | **FOURTH YEAR** | | |
| MAJOR | NURS 450 | Nursing Care of the Adult III | 5.5 | |
| MAJOR | NURS 452 | Nursing Care of Children and Adolescents | 4.5 | |
| MAJOR | NURS 493 | Research in Nursing | 3 | |
| MAJOR | NURS 471 | Community Health Nursing | | 3.5 |
| MAJOR | NURS 473 | Synthesis of Leadership Concepts in Nursing | | 3 |
| MAJOR | NURS 475 | Critical Care Nursing | | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | 1 |
| GE ELECT | ELECT | Elective | 3 | 3 |
| | | | **17** | **16.5** |

**Total: 137 CREDITS**

[2] fall or spring semester
[3] ROTC option available
[4] Recommended by the department

**NURS 100** Dr. Garrett, Prof. Nicoteri, Staff
**Family Health** 3 credits

(For non-Nursing majors.) Concepts and principles related to the promotion and maintenance of optimal family health. Considers factors pertinent to health needs and health practices throughout the life cycle.

**NURS 111** Drs. Farrell, Maddox
**(D)Women's Health** 3 credits

(Open to all students) Course focuses on historic, physiologic, social, cultural, emotional and economic issues affecting women's health. The course explores strategies to empower women's use of health-care services. Class members will be expected to participate actively in all discussions.

**NURS 112** Staff
**Sexual Development Through the Life Span** 3 credits

(Open to all students) Impact on sexual roles and expression, and health and social issues as they relate to sexual function. Emphasis is placed on developing sexual awareness of the student. 3-hour lecture.

**NURS 113** Staff
**Interpretation: Cardiac Rhythms** 1 credit

Prerequisites: Nursing 350 or Nursing 380; C/IL 102. Focus on the role of the nurse in providing care to individuals experiencing common cardiac dysrhythmias. One hour lecture.

**NURS 114** Staff
**Cardiopulmonary Critical Care Nursing** 3 credits

Prerequisites: Nursing 350 or Nursing 380; C/IL 102. Focus on the professional nurse's role in providing care to critically ill patients. Emphasis on nursing care for alterations in cardiopulmonary function, including common cardiac dysrhthymias.

**NURS 140** Dr. Bailey, Staff
**(W)Introduction to Nursing Concepts** 3 credits

An exploration of the core concepts of the client, health, nursing and health patterns. Historical, philosophical, and social development of nursing and the role of the professional nurse are presented. Understanding of health and health continuum in the broader perspective of the human person, the physiological, psychological, developmental, and socio-cultural modes. Introduction of the nursing process as it relates to the development of cognitive, interpersonal, and psychomotor skills to assist clients to attain and maintain an optimal level of health. **Service-learning 20 hours.** 3-hour lecture.

**NURS 213** Dr. Muscari
**(W)Child and Adolescent Health Promotion** 3 credits

Recommended Prerequisite: PSYC 221. (Open to all students) Focus on the professional's role as advocate, care-giver and/or teacher in the promotion of health for children and adolescents, directly through health maintenance and prevention and indirectly through health care policy.

**NURS 241** Drs. Carpenter, Zalon
**(W)Perspectives in Professional Nursing** 3 credits

Prerequisites: sophomore status in the Nursing Program; Registered Nurse students only. Perspectives in professional nursing explores concepts incorporated in the philosophy, organizing framework and curriculum structures of the Nursing program. Integration of the health patterns and nursing process in the delivery of professional nursing care is introduced. Pertinent issues impacting on the nursing profession are addressed.

**NURS 242** Staff
**Nursing Related to the Assessment of Health Patterns** 3 credits

Prerequisites: sophomore status, NURS 241; Registered Nurse students only. Focus on the professional nurse's role as caregiver in assessing, diagnosing and planning interventions of adaptive health patterns in individuals. Application of the nursing process to well persons and to individuals and families with alterations in health patterns. Exploration of concepts for planning holistic health care. 2-hour lecture, 3-hour laboratory.

**NURS 250** Dr. Muscari, Staff
**Physical Assessment Related to Health Patterns** 3 credits

(formerly Nursing 260) Prerequisite: BIOL 110-111; sophomore status in Nursing program. Development of beginning skill in the basic physical assessment techniques necessary for the promotion of optimal health as a care-giver. Focus on the professional nurse's role in assessing the physiological dimension of adaptive health patterns in individuals with a stable health status. 2 hours lecture and 3-hour laboratory.

**NURS 251** Dr. Harrington, Staff
**Nursing Related to Health Patterns** 4 credits

(Formerly Nursing 261) Prerequisites: Nursing 140, Nursing 250. Co-Requisite: Nursing 262. Focus on the professional nurse's role in promoting the individual's health status, utilizing the developmental, physiological, psychological and sociocultural dimensions of functional health patterns. Development of beginning skills in therapeutic nursing interventions. Service-learning 20 hours. Two(2) hours lecture, Six(6) hours laboratory

**NURS 262** Dr. Hudacek, Staff
**Pharmacology I** 1 credit

Prerequisites: CHEM 110-111, BIOL 110-111, BIOL 210. Principles of Pharmacology and specific drug groups. Emphasis is placed on drug actions, side effects, dosages and nursing responsibilities.

**NURS 310** Dr. Bailey, Staff
**(D)Understanding Transcultural Health Care** 3 credits

This course will focus on exploring values, beliefs, and lifestyles of diverse cultural groups in order to broaden the student's perception and understanding of health and illness and the variety of meanings these terms carry for members of differing groups.

**NURS 311** Staff
**Computer Applications in Nursing** 3 credits

Prerequisite: sophomore status in Nursing program, LPN or RN. Designed for Nursing majors or nurses who wish to learn computer capabilities for nursing applications in ways that do not involve programming. Emphasis is on interactive computer experience as an introduction to disk-operating systems, and word processing, computer-assisted instruction, file management, database management system, care-planning, software evaluation and research access.

**NURS 312** Dr. Maddox, Staff
**(D)Nursing the Older Adult** 3 credits

Prerequisite: junior status in Nursing program. Focus on the professional nurse's role of care-giver, advocate and teacher in promoting and maintaining adaptive responses of the older adult experiencing alterations in health patterns. Emphasis placed on multidimensional assessment factors and interventions in meeting bio-psycho-social needs.

**NURS 350** Staff
**Nursing Care of the Adult I** 5.5 credits

(Formerly Nursing 340/380) Prerequisites: Chemistry 110-111; Biology 110-111; Biology 210; Nursing 251. Co-Requisites: Nursing 360 and Nursing 352. The first of three courses that focuses on physiological and psychological adaptation to dysfunctional health patterns. Emphasis is placed on the nursing process and functional health patterns as a framework for practice. Pathophysiology and nursing care related to alterations in oxygenation, perfusion and metabolism, and the perioperative experience are included. Clinical experiences are designed to develop the professional nursing role of care giver, advocate and teacher in promoting and restoring health. Service-learning 10 hours. Three (3) hour lecture, 15 hrs clinical lab/week (every other week) alternate with Nursing 352.

**NURS 352** Staff
**Mental Health Nursing** 5.5 credits

(Formerly Nursing 340/380) Prerequisites: Chemistry 110-111; Biology 110-111; Biology 210; Nursing 251. Co-Requisites: Nursing 360 and Nursing 350. The focus is on psychological adaptation to dysfunctional health patterns. Emphasis is placed on the nursing process and functional

health patterns as a framework for practice. Psychopathology and nursing care of individuals and families experiencing alterations in mental health are explored. Clinical experiences are designed to develop the professional nursing role of care giver, advocate and teacher in promoting and restoring mental health. Three (3) hour lecture, 15 hrs clinical lab/week (every other week) alternate with Nursing 350.

**NURS 360** Ms. Nicoteri, Staff
**Pharmacology II** 1 credit
Prerequisite: NURS 262. Principles of pharmacology and specific drug groups related to alterations in the sleep-rest, activity-exercise, self-perception/self-concept health patterns. Emphasis is placed on drug actions, side effects, dosages, and nursing responsibilities. 1 hour lecture.

**NURS 361** Dr. Hudacek, Staff
**Pharmacology III** 1 credit
Prerequisite: NURS 360. Principles of pharmacology and specific drug groups related to alterations in the nutrition-metabolic, sexuality-reproduction, role-relationship, cognitive-perceptual, and elimination health patterns. Emphasis is placed on drug actions, side effects, dosages, and nursing responsibilities. 1 hour lecture.

**NURS 371** Staff
**Nursing Care of the Adult II** 5.5 credits
(Formerly Nursing 341/381) Prerequisites: Nursing 350 and Nursing 352. Corequisites: Nursing 361 and Nursing 373. The second of three courses that focuses on physiological and psychological adaptation to dysfunctional health patterns. Emphasis is placed on the nursing process and functional health patterns as a framework for practice. Pathophysiology and nursing care related to alterations in metabolism, nutrition, and immunity are included. Clinical experiences are designed to develop the professional nursing role of care giver, advocate and teacher in promoting and restoring health. Service-Learning: 10 Hours. 3-hour lecture, 15 hours clinical lab/week for 7 weeks, alternate with Nursing 473.

**NURS 373** Staff
**Nursing Care of the Child Bearing Family** 5 credits
(Formerly Nursing 341/381) Prerequisites: Nursing 350 and Nursing 352. Corequisites: Nursing 361 and Nursing 371. Focus is on the physiological and psychological adaptation to functional and dysfunctional health patterns in the childbearing family. Emphases is placed on the nursing process and functional health patterns as a framework for practice. Pathophysiology and nursing care related to childbearing, childbirth and their complications are addressed. Pathophysiological processes related to alterations in sexual health are also included. Clinical experiences are designed to develop the professional nursing role of care giver, advocate and teacher in promoting and restoring health. Three 3-hour lecture, 12 hrs clinical lab/week for 7 weeks, alternate with Nursing 371.

**NURS 384** Staff
**Perioperative Nursing** 3 credits
Prerequisite: NURS 350. This course presents concepts and information essential for perioperative nursing practice. Content includes essentials of perioperative procedures in relation to nurses' planning and management of the patient's surgical experience. Precepted clinical experiences are provided in various phases of the perioperative nursing: preoperative, operative and post-anethesia care. Emphasis is placed on the development of beginning skills in the operative setting. 1-hour lecture and 2-hour laboratory.

**NURS 405** Dr. Muscari
**Health Writing for Publication** 3 credits
(Cross-listed with NURS 505) This course enables students to enhance their writing skills by utilizing principles of effective writing as they relate to health issues. Students select projects to develop from idea to polished manuscript for both a professional journal and a consumer newspaper/magazine. On-line, web-based course.

**NURS 410** Dr. Zalon
**Nursing Management** 3 credits
Study of the management process in nursing settings with a focus on the planning, implementation and delivery of nursing care in complex organizations. Focus is on the collaborative role of nursing within the organization and the analysis and resolution of problems. 3-hour lecture.

**NURS 450** Staff
**Nursing Care of the Adult III** 5.5 credits
(Formerly Nursing 440/480) Prerequisites: Nursing 371, Nursing 373, and Nursing 361. Co-Requisites: Nursing 452. This is the final course in a three course sequence that focuses on physiological and psychological adaptation to dysfunctional health patterns. Emphasis is placed on the nursing process and functional health patterns as a framework for practice. Pathophysiology and nursing care related to alterations in mobility, elimination, cognition, and perception are included. Clinical experiences are designed to develop the professional nursing roles of caregiver, advocate and teacher in promoting and restoring health. Service-Learning: 10 Hours, Three (3) hours lecture, 15 hours clinical lab/week for 7 weeks, alternate with Nursing 452.

**NURS 452** Staff
**Nursing Care of Children and Adolescents** 4.5 credits
(Formerly Nursing 341/381) Prerequisites: Nursing 371, Nursing 373, and Nursing 361. Co-Requisites: Nursing 450. The focus is on the physiologic adaptation to functional and dysfunctional health patterns in children and adolescents. Emphasis is placed on the nursing process and functional health patterns as a framework for nursing practice. Health promotion and the pathophysiology and nursing care related to the disorders of childhood are included. Clinical experiences are designed to develop the professional nursing role of care giver, advocate and teacher in the promotion and restoration of health. Three (3) hours lecture, 9 hours clinical lab/week for 7 weeks, alternate with Nursing 450.

**NURS 471** Staff
**Community Health Nursing** 3.5 credits
(Formerly Nursing 440/480) Prerequisites: Nursing 450, Nursing 452. Co-Requisites: Nursing 473, Nursing 475. The focus is on the professional nursing roles of caregiver, advocate, teacher and leader/manager in promoting adaptive responses to functional and dysfunctional health patterns in individuals, families, communities and groups. The student synthesizes prior knowledge of Gordon's Health Patterns and all phases of the nursing process in meeting the health care needs of community-based clients in diverse population settings. Service-Learning 10 hours, 4.25 hours lecture/week for 5 weeks; 18 hours clinical lab/week for 5 weeks

**NURS 473** Staff
**Synthesis of Leadership Concepts in Nursing** 3 credits
(Formerly Nursing 482) Prerequisites: Nursing 450, Nursing 452. Co-Requisites: Nursing 471, Nursing 475. The focus is on the professional nurse's role as caregiver, advocate, teacher and leader/manager in promoting, restoring, and maintaining adaptive responses in individuals experiencing complex alterations in functional health patterns. Continued use of the nursing process and the development of case management skills in implementing and evaluating nursing care of the individual, family, community, and groups in collaboration with the nursing and interdisciplinary health teams is emphasized.Three(3) hrs/week lecture for 4.5 weeks; 18 hours clinical lab/week for 4.5 weeks, alternate with Nursing 475.

**NURS 475** Staff
**Critical Care Nursing** 3 credits
(Formerly Nursing 482) Prerequisites: Nursing 450, Nursing 452. Co-Requisites: Nursing 471, Nursing 473. The focus is on physiological and psychological adaptation to complex dysfunctional health patterns. Emphasis is placed on the nursing process and functional health patterns as a framework for practice. Pathophysiology and nursing care related to complex alterations in health patterns are included. Clinical experiences are designed to develop the professional nursing role of caregiver, advocate, teacher, and leader/manager in promoting, restoring and maintaining health. Three (3) hour lectures/ week for 4.5 weeks; 18 hours clinical lab/week for 4.5 weeks, alternate with Nursing 473.

**NURS 483** Dr. Carpenter, Staff
**Independent Study in Nursing** 3 credits
*Registered Nurse Students Only.* Prerequisite: senior status in the Nursing program and NURS 493. An independent project of academic or professional nature in an area specific to professional nursing. Students develop and complete a specific project and work on a one-to-one basis with a faculty member in the Department of Nursing.

**NURS 493** Drs. Bailey, Carpenter, Staff
**(W)Research in Nursing** 3 credits
Prerequisite: senior status in the Nursing program, PSYC 210. Introduction to and application of the principles and process of research in professional nursing practice. Study of research design, data-collection techniques, interpretation and critique of nursing research, literature, and reports and the development of the ability to become a discriminating consumer of nursing research. 3-hour lecture.

* The following option is available for ROTC Nurse cadets. Three credits are awarded for successful completion of the ROTC Nurse Summer Training Program (NSTP).

ROTC NSTP 3 credits
NURS 482 6 credits

# OCCUPATIONAL THERAPY

*DR. KASAR, Chairperson*

The Department of Occupational Therapy at the University of Scranton offers a five-year, entry-level, Master of Science degree in Occupational Therapy. The Occupational Therapy curriculum is based on a frame of reference that is developmental, humanistic, and holistic in nature, and which emphasizes optimal function throughout the life span. The program is integrated with a liberal arts and science foundation, and is designed to prepare strong, generalist, entry-level practitioners with the capacity for critical thinking, creative analysis and clinical reasoning.

Admission to the program is normally open to first-time incoming freshmen. Applicants will be selected on a competitive basis, with emphasis placed on high school record, standardized test scores, extracurricular activities, and letters of recommendation. Observation and/or volunteer experience in occupational therapy settings is required and must be documented. Transfer students will be considered on an individual, space-available basis

The course work is sequenced in a planned progression in order to build upon and develop knowledge and skills at increasing levels of complexity, competence, and integration. Therefore, all required courses must be completed in sequence. A minimum grade of C (2.00) must be attained in every undergraduate cognate and Occupational Therapy course. In addition, a service learning component is integrated into one OT course during each undergraduate semester, with a minimum of ten hours required per course.

Students usually enter this program as freshmen, proceed through four years of study and receive a Bachelor of Science degree in Health Sciences, and are awarded the MS in OT degree upon completion of graduate requirements. A minimum, overall, undergraduate GPA of 2.75 will be required in order to advance into the fifth or graduate year of the program; and a minimum, overall GPA of 3.00 must be achieved and maintained for all graduate courses. Required OT Level II Internships will be graded on a Satisfactory/Unsatisfactory basis.

Overall Framework for the Fifth (Master's) Year is Professional Leadership, with a focus on interdisciplinary practice and includes: development of enhanced professional behaviors, advanced OT theory, interpersonal dynamics and leadership skills, research and efficacy-based practice, and advanced clinical skills. The design is a full, five-year, academic program which allows sufficient time to include all necessary components, balanced in proper sequence, and without overloading any one semester.

Beginning in the third year, the OT Level I Clinical courses are scheduled immediately following the OT Practice course in that area to enhance the integration of theory and practice, to ensure sufficient numbers of clinical placements in the students' home locations, and to avoid conflict with the standard academic semester schedule. Courses in the OT graduate year serve to actualize the expanded curricular themes of professional leadership and interdisciplinary practice, enhanced professional behaviors and interpersonal dynamics, advanced OT theory, applied clinical research, and advanced clinical practice.

One of the two required OT Level II Internships follows completion of the undergraduate academic coursework; and therefore, students are better prepared for full-time, supervised practice. Also, students enter the academic portion of the Master's year having had some concentrated, extended, full-time clinical experiences, which make for better integration of theory and practice, and serve to enrich the classroom learning and teaching environment. The second, required, full-time internship follows completion of the fifth or graduate year of the program, and upon completion graduates are prepared for entry-level practice in occupational therapy. After the required clinical work is finished, a student may choose to participate in a Level II Internship in a specialty area of practice. Students are responsible for their transportation and travel costs to and from assigned clinical and internship settings, and should expect to pay room and board expenses during the Level II experiences.

The Occupational Therapy Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220. AOTA's phone number is (301) 652-AOTA. Graduates of the program will be able to sit for the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR). Most states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination.

The normal length of time for completion of the program is five and one-quarter years. All OT students must complete Level II Fieldwork within 24 months following completion of the academic portion of the program. Students will receive the MS in OT degree following completion of all academic and clinical requirements.

# OCCUPATIONAL THERAPY

| | Dept. and No. | Descriptive Title of Course | Credits FALL | SPRING |
|---|---|---|---|---|
| | | **FIRST YEAR** | | |
| MAJOR | OT 140 | Introduction to OT | 1 | |
| MAJOR | OT 141 | OT Theoretical Concepts | | 3 |
| COGNATE (GE NSCI) | BIOL 110-111[1] | Structure-Function of Human Body | 4 | 4[1] |
| COGNATE (GE S/BH) | SOC 110 | Introduction to Sociology | | 3 |
| COGNATE (GE S/BH | PSYC 110 | Fundamentals of Psychology | 3 | |
| GE SPCH | COMM 100 | Public Speaking | 3 | |
| GE WRTG | ENGL 107 | Composition | | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | 3 | |
| GE PHIL-T/RS | PHIL 120-T/RS 121 | Introduction to Philosophy-Theology I | 3 | 3 |
| GE FSEM-PHED | INTD 100-PHED | Freshman Seminar-Physical Education | 1 | 1 |
| | | | **18** | **17** |
| | | **SECOND YEAR** | | |
| MAJOR | OT 240-241 | Activity Analysis I and II | 3 | 3 |
| MAJOR | OT 275 | Clinical Kinesiology | | 3 |
| COGNATE | PT 256 | Human Anatomy for OT | 4 | |
| COGNATE | PSYC 221-222 | Child & Adol.-Adult & Aging | 3 | 3 |
| GE PHIL-T/RS | PHIL 210-T/RS 122 | Ethics-Theology II | | 6 |
| GE HUMN | HUMN ELECT | Humanities Electives | 6 | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | |
| | | | **17** | **18** |
| | | **THIRD YEAR** | | |
| MAJOR | OT 346-347 | Pathological Conditions I and II | 3 | 3 |
| MAJOR | OT 356 | Functional Neuroanatomy | 3 | |
| MAJOR | OT 360 | OT Practice I (Pediatrics) | 3 | |
| MAJOR | OT 361 | OT Practice II (Psychosoc. Rehab.) | | 3 |
| MAJOR | OT 380[2] | OT Level I Clinical-I (Peds.) | | 1(Int)[2] |
| MAJOR | OT 381[2] | OT Level I Clinical-II (Psysoc.) | | 1(Sum)[2] |
| COGNATE | HADM 112 | Health Systems | | 3 |
| COGNATE | HS 341 | Group Dynamics | 3 | |
| COGNATE | HS 333 | Multiculturalism in Human Srvs. | 3 | |
| GE QUAN | PSYC 210 | Psychological Statistics | | 3 |
| GE PHIL or T/RS | PHIL or T/RS | Elective | | 3 |
| GE HUMN | HUMN ELECT | Humanities Elective | | 3 |
| GE PHED | PHED ELECT | Physical Education | 1 | |
| | | | **16** | **2** **18** |
| | | **FOURTH YEAR** | | |
| MAJOR | OT 440 | Mgt. and Supv. of OT Services | | 3 |
| MAJOR | OT 451 | Hand Rehabilitation | 2 | |
| MAJOR | OT 460 | OT Practice III (Physical Rehab.) | 3 | |
| MAJOR | OT 461 | OT Practice IV (Geriatrics) | | 3 |
| MAJOR | OT 475 | Advanced Therapeutic Techniques | | 3 |
| MAJOR | OT 480[2] | OT Level I Clinical-III (Phys.) | | 1(Int)[2] |
| MAJOR | OT 493 | Research Methods in OT | 3 | |
| GE ELECT | ELECT | Free Electives | 6 | 6 |
| | | | **14** | **1** **15** |
| | | **FIFTH YEAR (Summer)** | | |
| MAJOR | OT 581[3] | OT Level II Internship-I (Psysoc.) | | 6 (Sum) |
| OR | | | | |
| MAJOR | OT 582[3] | OT Level II Internship-II (Phys.) | | |
| | | **FIFTH YEAR** | | |
| MAJOR | OT 501 | Leadership in Occupational Therapy | 3 | |
| MAJOR | OT 502 | Advanced OT Theory | 3 | |
| MAJOR | OT 560 | Advanced Interpersonal Dynamics | | 3 |
| MAJOR | OT 575 | Advanced Clinical Practice | | 3 |
| MAJOR | OT 593 | OT Applied Clinical Research I | 3 | |
| MAJOR | OT 594 | OT Applied Clinical Research II | | 3 |
| COGNATE | HAD 504 | Human Resources Management | 3 | |
| COGNATE | HAD 508 | Leadership in Health Care Organizations | | 3 |
| | | | **12** | **12** |
| | | **SIXTH YEAR (Summer)** | | |
| MAJOR | OT 581[3] | OT Level II Internship-I (Psysoc.) | | 6 (Sum) |
| or | | | | |
| MAJOR | OT 582[3] | OT Level II Internship-II (Phys.) | | |
| MAJOR | OT 583 | OT Level II Internship-III (Optional) | | (4-6) |

**Total: 172 CREDITS**

[1] Extra Science Credits
[2] OT Level I Clinical I, II, III are each a minimum of two weeks, full-time
[3] OT Level II Internship I, II are required and each a minimum of 12 weeks full-time in Psychosocial Rehabilitation and Physical Rehabilitation. Time period scheduled for individual students may alternate as determined by the Department, and with consideration of student needs and circumstances.

**OT 140** Prof. Ikiugu
**Introduction to Occupational Therapy** 1 credit
An introduction to the profession of occupational therapy, including an overview of history, philosophical bases, standards and ethics, and current and future directions for practice. Clinical areas of focus and practice settings are presented with particular emphasis placed on the role of the occupational therapist. Majors only. One two-hour seminar/week, and a minimum total of ten hours of service learning.

**OT 141** Prof. Reinson, Prof. Ikiugu
**Occupational Therapy Theoretical Concepts** 3 credits
A comprehensive review of occupational therapy theoretical frames of reference and models of practice, with emphasis on an analysis of their history, philosophical foundations, and applications to practice. The focus is on human occupation and adaptation, and its multicultural aspects. Three hours lecture/week, and a minimum total of ten hours of service learning.

**OT 240** Prof. Waskiewicz
**Activity Analysis I** 3 credits
Analysis, theory and application of activities and media used in occupational therapy treatment. Course will consider developmental parameters, and include self-care, work, and leisure aspects for the child and adolescent. Adaptation and grading of purposeful activities for therapeutic intervention, and practice in presenting and teaching activities will be included. Prerequisite: OT 141. Corequisite: PT 256. One hour lecture, four hours lab/week, and a minimum total of ten hours of service learning.

**OT 241** Prof. Reinson, Prof. Ikiugu
**Activity Analysis II** 3 credits
Analysis, theory, and application of additional activities and media used in occupational therapy treatment. Course will consider developmental parameters, and include self-care, work, and leisure aspects for the young and older adult. Adaptation and grading of purposeful activities for therapeutic intervention, and practice in presenting and teaching activities will be included. Prerequisite: OT 240. Corequisite: OT 275. One hour lecture, four hours lab/week, and a minimum total of ten hours of service learning.

**OT 275** Dr. Kasar
**Clinical Kinesiology** 3 credits
Application of the principles of functional anatomy with emphasis on normal and abnormal movement. Measurement techniques for range of motion and muscle testing are presented, with emphasis on the movement and strength requirements found in self-care, work, and leisure activities. Concepts are integrated in lab experiences. Prerequisites: Biology 110-111, PT 256. Two hours lecture, two hours lab/week.

**OT 346** Prof. Ikiugu
**Pathological Conditions I** 3 credits
A review of pathological conditions seen in occupational therapy practice, including: diagnosis, etiology, progression, performance deficits, treatment, prognosis, and functional outcomes. Emphasis placed on examining developmental/pediatric disabilities, and psychosocial dysfunction. The promotion of health, prevention, and implications for the individual, family, and society are discussed. Corequisite: OT 356, OT 360. Three hours lecture/week.

**OT 347** Prof. Ikiugu
**Pathological Conditions II** 3 credits
A review of pathological conditions seen in occupational therapy practice, including: diagnosis, etiology, progression, performance deficits, treatment, prognosis, and functional outcomes. Emphasis placed on examining adult physical dysfunction, and geriatric difficulties. The promotion of health, prevention, and implications for the individual, family, and society are discussed. Prerequisite: OT 346. Corequisite: OT 361. Three hours lecture/week.

**OT 356** Dr. Kasar
**Functional Neuroanatomy** 3 credits
An overview of applied neuroanatomy and function, with emphasis on sensory, perceptual, and motor performance. Normal structure and function are discussed, together with nervous system dysfunction, as applied to self-care, work, and leisure activities related to OT practice. Prerequisites: PT 256, OT 275. Corequisite: OT 360. Two hours lecture, two hours lab/week.

**OT 360** Prof. Reinson
**Occupational Therapy** 3 credits
**Practice I: Pediatrics**
An overview of theoretical frames of reference, evaluation, and treatment intervention strategies used to enhance the function of infants, children, and other individuals with developmental disabilities. Methods of observation, assessment, and treatment approaches are introduced and practiced in lab simulations and field trips to area facilities. Prerequisites: OT 241, OT 275. Corequisites: OT 346, OT 356. Two hours lecture, two hours lab/week, and a minimum total of ten hours of service learning.

**OT 361** Prof. Ikiugu
**Occupational Therapy** 3 credits
**Practice II:**
**Psychosocial Rehabilitation**
An overview of theoretical frames of reference, evaluation, and treatment intervention strategies used to enhance the function of individuals with psychosocial dysfunction. Methods of observation, assessment, and treatment approaches are introduced and practiced in lab simulations and field trips to area facilities. Prerequisites: HS 341, OT 360, OT 380. Corequisite: OT 347. Two hours lecture, two hours lab/week and a minimum total of ten hours of service learning.

**OT 380** Prof. Reinson
**Occupational Therapy** 1 credit
**Level I Clinical - I: Pediatrics**
Directed observation and supervised participation in the occupational therapy process in a pediatric/developmental disabilities setting. Emphasis on the integration of theory and practice. Prerequisites: OT 346, OT 356, OT 360. Intersession, two weeks, full-time.

**OT 381** Prof. Ikiugu
**Occupational Therapy** 1 credit
**Level I Clinical - II: Psychosocial Rehabilitation**
Directed observation and supervised participation in the occupational therapy process in a psychosocial rehabilitation setting. Emphasis on the integration of theory and practice. Prerequisites: OT 347, OT 361, OT 380. Summer, two weeks, full-time.

**OT 440** Prof. Ciucci
**Management and Supervision** 3 credits
**of Occupational Therapy Services**
An application of major management principles to the provision of occupational therapy services, with emphasis on the administrative and supervisory requirements in managing an occupational therapy department. Information provided concerning program planning, recruitment, marketing, budgeting, supervision, documentation, evaluation, reimbursement, and quality assurance. Corequisites: OT 461, OT 475. Three hours lecture/week.

**OT 451** Prof. Ciucci
**Hand Rehabilitation** 2 credits
An indepth review of functional anatomy of the hand and arm, with emphasis on rehabilitation principles and basic splinting techniques. Theoretical concepts, evaluation, and fabrication procedures are integrated in lab experiences. Prerequisites: OT 256, OT 275. Corequisite: OT 460. One hour lecture, two hours lab/week.

**OT 460** Prof. Ciucci
**Occupational Therapy Practice III:**
**Physical Rehabilitation** 3 credits
An overview of theoretical frames of reference, evaluation, and treatment intervention strategies used to enhance the function of individuals with major physical disabilities. Emphasis placed on the neurodevel-

opmental, biomechanical, and rehabilitative approaches. Methods of observation, assessment, and treatment techniques are introduced and practiced in lab simulations and field trips to area facilities. Prerequisites: PT 256, OT 275, OT 360, OT 361. Corequisite: OT 451. Two hours lecture, two hours lab/week, and a minimum total of ten hours of service learning.

**OT 461** Prof. Waskiewicz
**Occupational Therapy Practice IV: Geriatrics** 3 credits

An overview of theoretical frames of reference, evaluation, and treatment intervention strategies used to enhance the function of the elderly. Emphasis placed on understanding the biopsychosocial changes, characteristics, and needs of older persons. Methods of observation, assessment, and treatment approaches are introduced and practiced in lab simulations and field trips to area facilities. Prerequisites: OT 460, OT 480. Corequisites: OT 440, OT 475. Two hours lecture/two hours lab/week, and a minimum total of ten hours of service learning.

**OT 475** Prof. Ciucci
**Advanced Therapeutic Techniques** 3 credits

Advanced theoretical concepts and treatment applications designed to provide exposure to the most current areas of focus in practice. The approaches reviewed may include advanced group work, neurodevelopmental treatment, sensory integration, joint mobilization, industrial medicine, adaptive seating, and assistive technology. Prerequisites: OT 451, OT 460, OT 480. Corequisites: OT 440, OT 461. Two hours lecture, two hours lab/week.

**OT 480** Prof. Ciucci
**Occupational Therapy Level I Clinical - III: Physical Rehabilitation** 1 credit

Directed observation and supervised participation in the occupational therapy process in a physical rehabilitation setting. Emphasis on the integration of theory and practice. Prerequisites: OT 381, OT 451, OT 460. Intersession, two weeks, full-time.

**OT 493** Prof. Reinson, Staff
**Research Methods in Occupational Therapy** 3 credits

An introduction to research design, data collection, analysis, and interpretation of findings. Emphasis placed on critical review of occupational therapy research studies, application to clinical practice, quantitative, and qualitative methods. Concepts are integrated through the preparation of a research proposal. Prerequisite: Psych. 210. Corequisites: OT 451, OT 460. Three hours lecture/week.

**OT 501** Staff
**Leadership in Occupational Therapy** 3 credits

Extensive analysis of the past, present, and future of leadership in occupational therapy. This course will examine the historical influences of the profession's founders, current trends in occupational therapy leadership, and possibilities for leadership evolution. Identification of the tools that constitute the artifacts of occupational therapy's leadership culture will be interwoven throughout the course. Original works by past and present leaders in occupational therapy will provide opportunity to analyze the personal and professional development of individual leadership qualities and styles. Prerequisite: OT 581 or OT 582. Corequisites: OT 502, OT 593. Three hours lecture/week.

**OT 502** Staff
**Advanced Occupational Therapy Theory** 3 credits

In-depth analysis of how theory and knowledge is constructed, and its effect on practice. This course will examine factors that influence the development of OT theory and knowledge by demonstrating how basic inquiry leads to application and

the refinement of what constitutes best practice. A review of how occupational therapy paradigms have been established and changed over time, and how these changes have influenced occupational therapy practice will be presented. Particular attention will be paid to the cultural, economic, and demographic motivators of theory development and application. Prerequisite: OT 581 or OT 582. Corequisites: OT 501, OT 593. Three hours lecture/week.

**OT 560** Staff
**Advanced Interpersonal Dynamics** 3 credits
A review of the concepts and aspects of intrapersonal, interpersonal, and group dynamics provides a foundation for advanced study of human interactions between the disabled and the abled. An in-depth analysis of disability from the vantage point and perspective of the disabled is explored. Contemplation of this very diverse culture, as seen through the lenses of individuals with disabilities, is offered to enhance the analysis and understanding of self and others.Theoretical approaches and concepts are integrated through directed group activities. Prerequisites: OT 501, OT 502. Corequisites: OT 575, OT 594. Two hours lecture, two hours lab per week or equivalent.

**OT 575** Staff
**Advanced Clinical Practice** 3 credits
In-depth exposure to selected areas that represent the current focus of advanced clinical practice in occupational therapy. Advanced theoretical concepts, assessment, and treatment applications are covered in each area with emphasis on the development of basic intervention skills. The areas of practice examined in the course may include school-based pediatrics, oral-motor functioning, and neonatology. assistive technology and adaptive equipment; and community based services. Prerequisites: OT 501, OT 502. Corequisites: OT 560, OT 594. Two hours lecture, two hours lab per week or equivalent.

**OT 581** Prof. Hill
**OT Level II Internship - I: Psychosocial Rehabilitation** 6 credits
Full-time, supervised, level II clinical experience in the area of psychosocial rehabilitation. In order to be eligible to sit for the national certification examination for Occupational Therapist Registered, the student must achieve at least the minimum scores on the AOTA Fieldwork Evaluation. Prerequisite: completion of all undergraduate coursework or academic graduate coursework. Summer, following the fourth or fifth year of the program, twelve weeks minimum, full-time.

**OT 582** Prof. Hill
**OT Level II Internship - II: Physical Rehabilitation** 6 credits
Full-time, supervised, level II clinical experience in the area of physical rehabilitation. In order to be eligible to sit for the national certification examination for Occupational Therapist Registered, the student must achieve at least the minimum scores on the AOTA Fieldwork Evaluation. Prerequisites: completion of all undergraduate coursework or academic graduate coursework. Summer, following the fourth or fifth year of the program, twelve weeks minimum full-time.

**OT 583** Prof. Hill
**OT Level II Internship - III: Specialty** (Optional) 4-6 credits
Full-time, supervised, level II clinical experience in a specialty area of practice. Arranged on an availability basis. Prerequisites: OT 581, OT 582. Fall, following the fifth year of the program, eight to twelve weeks, full-time.

**OT 593** Staff

**OT Applied Clinical Research I** 3 credits

This course promotes entry-level research competencies in healthcare, education, and community settings by engagement in actual research activities that are drawn upon and amplified in the research process under the direction of a research advisor. The student will gain first hand knowledge of three major roles applicable to this level including consumer of research, assistant to a research investigator, and/or a beginning research investigator. Prerequisites: OT 493, OT 581 or OT 582. Corequisites: OT 501, OT 502. Three hours seminar, advising session or equivalent/week.

**OT 594** Staff

**OT Applied Clinical Research II** 3 credits

This course involves the completion of a systematic research study that is based on a body of knowledge or theoretical approach, and designed to contribute to the field of occupational therapy. This form of scientific inquiry is embedded in an investigation that utilizes quantitative and/or qualitative scientific methods and research designs to address specific practice-based questions. The focus of the research study is to contribute to the knowledge base, gain and disseminate information necessary for sound decision-making regarding issues of concern to the profession of occupational therapy. Prerequisites: OT 501, OT 502, OT 593. Corequisites: OT 560, OT 575. Three hours seminar, advising session or equivalent/week.

# PHYSICAL THERAPY

*DR. EDMUND M. KOSMAHL, Chairperson*

The Department of Physical Therapy at The University of Scranton offers a five-year, entry-level Master's Degree in Physical Therapy (MPT). The Physical-Therapy curriculum is designed to emphasize (a) life-span development and the inherent changes which occur throughout one's life and (b) prevention of movement dysfunction. Quality preparation of the entry-level physical therapist is the overriding goal of the MPT degree program. Graduates will be able to serve the physical-therapy needs of the general populace. They will be prepared for direct patient care and the education of patients, their families, peers, health professionals and the lay community. Graduates are also given the basic knowledge to provide consultation services, contribute to the management practices found in the provision of physical-therapy services and recognize the importance of sound research in the continued development of the profession.

Admission of students is restricted to freshmen. The number of qualified applicants admitted to the Physical-Therapy curriculum is dependent upon available academic and clinical resources. A student's matriculation in the pre-professional years is contingent upon satisfactory completion (C or better) of all department prerequisites, as well as successful completion of general University requirements necessary for graduation. **No Advanced Placement (AP) credit will be accepted for the Biology, Chemistry, or Physics courses.**

In the first year and one half (pre-professional), students focus on completion of general-education requirements and courses listed as prerequisites to the physical-therapy curriculum. In the third, fourth, and fifth years, concentration is placed upon physical-therapy courses which pertain to basic and applied sciences, clinical science, patient evaluation and treatment techniques, management of physical-therapy services and clinical-education experiences in numerous, varied health-care facilities. Experience in direct patient care and administration of patient-care services is provided by clinical rotations through physical therapy services located in affiliated health-care institutions and agencies. In addition, PT majors must do ten hours of community service per semester during their four undergraduate years.

Advancement to professional studies (junior year) is automatic for pre-professional students (freshman and sophomore years) who satisfy the following criteria: 1. Completion of all specified pre-professional, prerequisite and general-education requirements; 2. Attainment of a minimum grade of C in all department prerequisites in the sciences and department courses in the pre-professional phase of the curriculum; 3. Maintenance of a 2.50 grade-point average (GPA) during fall, intersession, and spring of the freshman year and a 2.75 GPA during the fall and spring terms of the sophomore year; 4. Written documentation of approximately 70 hours of volunteer or work experience with a licensed physical therapist (the letter of recommendation should address the time spent in the facility, the nature of the volunteer/work experience and the potential the student has to be a physical-therapy practitioner); 5. A positive evaluation of personal abilities and aptitudes by department faculty responsible for courses provided in the pre-professional phase of the curriculum; and 6. Up-to-date completion of community-service hours.

When students enter the professional phase of the curriculum, the cumulative GPA requirements are as follows: junior year 2.85, senior year 3.00, and graduate year 3.00. Students are expected to complete the curriculum in the five-year time span and in the sequence indicated. All students are to complete satisfactorily the clinical internships specified. Costs associated with liability insurance, uniforms, travel, meals, temporary housing, and attainment and maintenance of CPR certification are the responsibility of individual students.

After the satisfactory completion of all curriculum requirements at the end of the fourth year, students will be awarded a **Bachelor of Science degree in Health Sciences.** ***THIS degree will not permit the student to practice Physical Therapy.*** A comprehensive examination will be given to all Physical Therapy majors during fall term of the graduate (fifth) year of the MPT degree program. Students must pass the examination to enter into the final phase of the Clinical-Education sequence (PT 581 - Clinical Internships). If the student does not receive a passing grade, there will be a delay of his or her entrance into the final clinical internships until satisfactory performance on the exam is achieved. Students must successfully complete all of the program requirements contained within the 5-year MPT degree program in order to sit for the licensure exam and to practice the profession of physical therapy.

**Math Options for Physical Therapy Majors ***

1. Students with a B+ average in high school math (through trigonometry or pre-calculus) and a score of less than 600 on the SAT in math will be enrolled in Math 103.
2. Students with a B+ average in high school math (through pre-calculus) and a score of 600 or greater on the SAT in math will be enrolled in MATH 114.

* University's Mathematics Placement Procedures may overrule the above options.

3. AP credit may be awarded in MATH 114 on the basis of the CEEB exam; no AP credit is available for MATH 103 on the basis of the CEEB exam.

# PHYSICAL THERAPY PROGRAM AFFILIATED CLINICAL EDUCATION CENTERS

The PT Program has fully-executed contracts with approximately 350 clinical sites across the United States, allowing our students adequate choices to satisfy program requirements. The clinical-education experiences are provided in a variety of clinical-practice settings designed to model current practice environments. Students are encouraged to experience a variety of clinical settings in order to broaden their clinical-learning experiences, but also to incorporate experiences beyond patient care. The objectives of the clinical-education experiences as well as student objectives for clinical education include: participation in administration; teaching, quality assurance, supervision of physical-therapist assistants and other supportive personnel; interaction, communication and collaboration with other health-care professionals; and clinical research.

Our list of contracted sites has been slowly increasing since the inception of the program. In the current health care market, the actual listing of names/locations of clinical sites is outdated as quickly as it is printed (in light of mergers, corporate influences, etc.). The sites most frequently utilized by University of Scranton students are located in the Pennsylvania, New Jersey, New York, Delaware and Maryland areas. Our available sites extend as far as Hawaii, Oregon and Washington to the west; Arizona, Texas, Louisiana and Florida to the south; along the east coast; and scattered throughout the nation. This variety of locations parallels the variety of clinical opportunities which include: inpatient general and specialty experiences, inpatient extended care, comprehensive outpatient experiences, community health care, and community/home-based experiences.

# PHYSICAL THERAPY

| | Dept. and No. | Descriptive Title of Course | Credits | | |
|---|---|---|---|---|---|
| | | **FIRST YEAR** | **FALL** | **INT** | **SPRING** |
| GE WRTG-SPCH | WRTG 107-COMM 100 | Composition-Public Speaking | 3 | | 3 |
| GE C/IL | C/IL 102 | Computing and Information Literacy | 3 | | |
| GE QUAN | MATH 103 or 114 | Pre-Calculus or Calculus | | 4[3] | |
| GE PHIL-T/RS | PHIL 120-T/RS 121 | Introduction to Philosophy-Theology I | 3 | | 3 |
| GE HUMN | HUMN ELECT | Humanities Elect | | 3[3] | 3 |
| GE NSCI | BIOL 110-111 | Structure-Function Human Body | 4 | | 4 |
| GE NSCI | CHEM 112-113 | General & Analytical Chem I-II | 4½ | | 4½ |
| FSEM | INTD 100[1] | Freshman Seminar | 1 | | |
| | | | **18½** | **7** | **17½** |
| | | **SECOND YEAR** | | | |
| MAJOR | PT 245 | Principles of Human Anatomy | | | 3 |
| MAJOR | PT 290[1] | Clinical Educ. Seminar I | 3 | | 2 |
| GE PHIL-T/RS | PHIL 210-T/RS 122 | Ethics-Theology II | 3 | 3[3] | |
| GE HUMN | HUMN ELECT | Humanities Elect | | | 6 |
| GE NSCI | BIOL 245 | General Physiology | 4½ | | |
| GE NSCI | PHYS 120-121 | General Physics | 4 | | 4 |
| GE S/BH | PSYC 110-221 | Fund. Psych.-Childhood/Adol. | 3 | | 3 |
| | | | **17½** | **3** | **18** |
| | | **THIRD YEAR** | | | |
| MAJOR | PT 340 | Basic Tech. in PT Mgmt. | 3 | | |
| MAJOR | PT 342 | Mgmt. of the Elderly | | | 3 |
| MAJOR | PT 345 | Adv. Human Anatomy for PT | 4 | | |
| MAJOR | PT 350 | Intro. to Ther. Exercise | 3 | | |
| MAJOR | BIOL 348 | Neurophysiology | | | 3 |
| MAJOR | PT 347L | Applied Neuroscience Lab for PT | | | 1 |
| MAJOR | PT 351 | Ortopaedic PT | | | 4 |
| MAJOR | PT 360 | Clinical Sciences I | | | 4 |
| MAJOR | PT 375 | Kines./Pathokines for PT | 3 | | |
| MAJOR | PT 376/378 | Therapeutic Modalities I, II | 2 | | 2 |
| MAJOR | PT 390[1] | Clinical Educ. Seminar II | | | 1 |
| | | | **15** | | **18** |
| | | **FOURTH YEAR (Summer)** | | | |
| MAJOR | PT 480 | PT Internship I (2 Cr.) | | | |
| | | **FOURTH YEAR** | | | |
| MAJOR | PT 440 | Org. and Mgmt. in PT | | | 3 |
| MAJOR | PT 452/453[4] | Advanced Clinical Skills | 1-2 | | 1-2 |
| MAJOR | PT 455 | Pediatric Development | | | 3 |
| MAJOR | PT 456 | PT App. to Neuro. Popul. | | | 4 |
| MAJOR | PT 460 | Clinical Sciences II | 3 | | |
| MAJOR | PT 465 | Psyc./Soc. Aspects of Disabilities | 3 | | |
| MAJOR | PT 470 | Cardiopul. PT | 4 | | |
| MAJOR | PT 477 | Teaching in PT | 2 | | |
| MAJOR | PT 482 | Prof. Development (opt.) | | | 2 |
| MAJOR | PT 490[1] | Cl. Edu. Seminar III | | | 1 |
| MAJOR | PT 493 | Intro. to Research | | | 3 |
| GE QUAN | PSYC 210 | Psychological Statistics | 3 | | |
| | | | **15-17** | | **16-18** |
| | | **FIFTH YEAR (Summer)** | | | |
| MAJOR | PT 580 | PT Internship (3 Cr.) | | | |
| | | **FIFTH YEAR** | | | |
| MAJOR | PT 552[2] | Advanced Clinical Skills | 1-2 | | |
| MAJOR | PT 555 | Correlative Rehabilitation | 4 | | |
| MAJOR | PT 556 | Motor Control/Motor Learning | 3 | | |
| MAJOR | PT 581 | PT Internship III | | | 12 |
| MAJOR | PT 582 | Prof. Development (opt.) | 2 | | |
| MAJOR | PT 584 | Special Topics in Health Care | 2 | | |
| MAJOR | PT 590 | Clinical Educ. Seminar IV | 1 | | |
| MAJOR | PT 593 | Res. Design & Implementation | 2 | | |
| | | | **14-16** | | **12** |
| | | | | **Total:** | **174½ CREDITS** |

[1] Twenty hours of service-learning integrated in these courses
[2] A minimum of two one-credit advanced clinical skills required (maximum of three recommended) to complete degree requirements
[3] If special circumstances (eg, AP credits) lighten fall or spring loads, intersession courses may be taken during fall or spring terms
[4] Since 452/3 can be taken over three semesters, student may elect to omit this course during any one term

**PT 245** Drs. Mattingly, Kosmahl
**Principles of Human Anatomy** 3 credits
(PT majors only) An introduction to human gross anatomy emphasizing a systemic approach to the histological and morphological concepts of the skeletal, muscular, circulatory, and nervous systems. An introduction to normal human movement with emphasis on joint arthrokinematics and the mechanics of muscle action is also presented. 2-hour lecture, 2-hour lab/week.

**PT 256** Dr. Pokowicz
**Human Anatomy for Occupational Therapy** 4 credits
(OT majors only) A regional in-depth study of human anatomy with major emphasis on functional anatomy. This will be accomplished through the study of prosected human specimens and surface anatomy. 3-hour lecture, 2-hour lab/week.

**PT 290** Prof. Hakim
**Clinical Education Seminar I** 2 credits
(PT majors only) The first of four clinical education seminars will include an overview of the history, current practice and future profession of physical therapy. Current practice sites and settings are presented and observed with consideration of traditional and emerging roles and responsibilities of the physical therapist. Students will participate in several half-day group observations of local clinics. Comprehensive exam of medical terminology will be included in this course. This course includes a service learning component. 2 hour lecture/week.

**PT majors with junior status in PT program:**

**PT 340** Profs. Leininger, Wagner
**Basic Techniques in Patient Management** 3 credits
This course is designed to instruct the learner in basic patient-management techniques which include: emergency care, draping, positioning, bandaging, early mobility, body mechanics, transfers, gait/assistive device training, patient interviews, equipment management, sterile technique, universal precautions and OSHA regulations. Emphasis is placed on clinical observation and selection of appropriate interventions for safe and effective patient management. Laboratory exposure for demonstration and practice of all techniques is provided. Also included is the management of emergencies and critical incidents. 2-hour lecture, 2-hour lab/week.

**PT 342** Staff
**Management of the Elderly** 3 credits
A study of the responsibilities of the physical therapist with the well elderly. Emphasis on prevention of illness, injury, or disease through effective and timely intervention will be covered. A systematic approach to normal aging is also presented. 3-hour lecture/week.

**PT 345** Dr. Mattingly
**Advanced Human Anatomy for Physical Therapy** 4 credits
An in-depth study of gross human anatomy emphasizing a regional approach to the structural and functional relationships of skeletal, muscular, circulatory, and nervous structures comprising the head, neck, trunk, and extremities. Organic systems relevant to physical-therapy practice are also examined. Human dissections are included. 2 hours lecture, 4 hours lab/week.

**PT 347** Dr. Mattingly
**Applied Neuroscience Laboratory for PT** 1 credit
Application of neuroscience principles to understand clinical manifestations of neurological dysfunctions and evaluative techniques. Course will include an anatomical study of clinically relevant parts of the central and peripheral nervous systems. 2-hour lab/week

**PT 350** Prof. Leininger
**Introduction to Therapeutic Exercise** 3 credits
This course introduces the concepts of fitness and exercise and prepares the student to design and implement basic therapeutic

exercise regimens for clinical use. Normal responses to exercise and training, and patient responses to traditional therapeutic exercise regimens are presented. The course investigates physical fitness as a function of the following determinants: strength, endurance, flexibility, power and skill. Physiology of the neuromuscular system as it relates to exercise is reviewed. Energy metabolism and nutritional support for energy metabolism are discussed. The effects of aging, disuse, immobilization, denervation, and selected drugs on exercise performance are discussed. Laboratory activities include exposure to techniques for the clinical assessment and improvement of strength, flexibility, endurance, power, and skill (including manual muscle testing and goniometry).

**PT 351** Dr. Kosmahl, Prof. Leininger
**Orthopaedic Physical Therapy** 4 credits
This course prepares the student to practice entry-level orthopaedic physical therapy. Evaluation and treatment of musculoskeletal system dysfunction utilizing exercise, manual therapy (mobilization), and manual and mechanical traction are emphasized. Students learn to identify clearly specific musculoskeletal problems, and to plan and implement appropriate physical-therapy interventions. Students learn to recognize major signs and symptoms of systemic disease that can mimic primary musculoskeletal lesions. Evaluation tools are presented to help students recognize problems that are beyond physical-therapy expertise. Students learn how to make treatment-versus-referral decisions for patients who present presumed musculoskeletal problems. 2 hours lecture, 4 hours lab/week.

**PT 360** Drs. Sanko, Mattingly, Staff
**Clinical Sciences I** 4 credits
This course presents an overview of selected diseases and disorders for which patients are commonly referred for physical therapy evaluation and treatment. The basic principles of pathology are integrated with current concepts of patient management. Relevant medical and surgical interventions will be reviewed with emphasis on the team approach of patient care and rehabilitation. 4 lecture hours/week.

**PT 375** Dr. Kosmahl
**Kinesiology and Pathokinesiology for Physical Therapy** 3 credits
This course presents a study of normal movement, and movement dysfunction associated with selected forms of pathology. Emphasis is placed on the mechanics of muscle actions and joint arthrokinematics, and biomechanical factors are discussed. Normal and pathological gaits are studied. 2-hour lecture, 2-hour lab/week.

**PT 376** Dr. Sanko, Prof. Leininger
**Therapeutic Modalities I** 2 credits
This course prepares the student for the safe, effective and appropriate application of therapeutic heat, cold, light, water, intermittent compression, and massage. The scientific basis for the use of these modalities is reviewed and correlated to issues of clinical evaluation, decision-making, and application. Laboratory exposure to these modalities is provided. 1-hour lecture, 2-hour lab per week.

**PT 378** Dr. Kosmahl, Staff
**Therapeutic Modalities II** 2 credits
This course prepares the student for the safe, effective and appropriate use of electrotherapeutic modalities. The course builds upon the knowledge and skills learned in Therapeutic Modalities I. The pertinent physics and physiology are reviewed. Clinical evaluation, decision-making, and application are presented. The course reviews the physiology of pain and how pain can be modulated by use of electrotherapeutic modalities. Principles of electrophysiologic testing and the role of electrotherapeutic testing in neuromuscular diagnosis are presented. Laboratory exposure to all electrophysiologic testing equipment and procedures is given. 1-hour lecture, 2-hour lab per week.

**PT 390** Prof. Wagner
**Clinical Education Seminar II** 1 credit
This second seminar will prepare students for their first full-time internship. A thorough orientation to the clinical education component of the curriculum will be provided, focusing on expectations, objectives, goals and responsibilities. In addition, an emphasis will be placed on gaining familiarity with the medical record, conducting patient interviews, developing active listening skills and acquiring beginner level competency in professional documentation. Site selections for Internships # I and II will be made via a lottery system. This course includes a service learning component.

**PT majors with senior status in PT program:**

**PT 440** Staff
**Organization and Management in Physical Therapy** 3 credits
Introduction to the management process with specific information devoted to inter- and intra-departmental relationships, leadership style and theories, motivation, and decision making. Topics related to administrative policies/procedures in the provision of patient services are discussed. Student group presentations on specific management topics are required. 3-hour lecture/week.

**PT 452/453/552** Dr. Kosmahl
**Advanced Clinical Skills** (var. credits)
This course is comprised of several 1 credit modules, each with a specific clinical focus. All students will be required to take a minimum of 2 modules. Module offerings will be available fall and spring semesters and will be posted during preregistration. The course format will be determined by the instructor. Full-time PT faculty and area PT clinicians will offer these short (15 hour) courses.

**PT 455** Profs. Grant, Markwith
**Introduction to Developmental Pediatrics** 3 credits
This course involves a comprehensive look at the normal and abnormal development of motor and cognitive issues from the prenatal period through early childhood. Theories of development and their influence on treatment concepts will be discussed. Use of developmental assessments tools will be introduced and the student will demonstrate basic proficiency in choosing pediatric assessments. Physical-therapy management of common pediatric conditions will be discussed. Lab experiences include: live observations and demonstrations, videos, hands-on experience with select assessment tools, and applicable clinical research. 2-hour lecture, 2-hour lab/week.

**PT 456** Profs. Hakim, Grant
**PT Approaches to Neurological Populations** 4 credits
A study of classic and contemporary approaches in the assessment and treatment of neurological populations. Concepts of normal/abnormal movement, cognition and perception, proprioceptive neuromuscular facilitation, neurodevelopmental treatment, and motor control/motor learning issues are discussed. There will be an in-depth analysis of assessment, documentation and treatment planning. Lab experiences will concentrate on treatment planning and application, with problem solving scenarios. Live demonstrations, videos and applicable clinical research will be incorporated into the learning process. 2 hours lecture, 4 hours lab/week.

**PT 460** Prof. Grant
**Clinical Sciences II** 3 credits
Overview of the diagnosis, etiology, evaluation and treatment of diseases/disorders associated within the central and peripheral nervous systems. Specific applications for physical therapy intervention are discussed. 3-hour lecture/week.

**PT 465** Prof. Wagner
**Psychosocial Aspects of Physical Disabilities** 3 credits
A comprehensive look at the psychosocial components of physical disabilities. Particular emphasis will be placed on understanding the psychological, behav-

ioral, emotional and cognitive influences affecting rehabilitation outcomes. Selected physical conditions will be examined. Concepts regarding life stage development: stages of adjustment, strategies for intervention, sexuality, family adjustment and terminal illness will be explored. The impact of societal beliefs and values about the disabled will be discussed. Case presentations will supplement didactic material. 3-hour lecture/week.

**PT 470** Dr. Sanko
**Cardiopulmonary Physical Therapy** 4 credits
An overview of the human physiological response to physical activity. Emphasis is placed on the acute and chronic adaptation of the body systems to activity by individuals in various states of health and disease throughout the lifespan. Principles of cardiopulmonary disease prevention, treatment, and rehabilitation are examined. Laboratory experiences are designed to illustrate these principles and develop skills necessary for their implementation. 3-hour lecture, 2-hour lab/week.

**PT 477** Staff
**Teaching in Physical Therapy** 2 credits
Discussion of teaching, learning theories and the roles of the PT as a teacher is offered. Development and implementation of learning experiences (emphasis is on the student as a facilitator of patient learning) and the process of presenting information are included. 2 hours lecture/week.

**PT 480** Prof. Wagner, Hakim
**Internship I** 2 credits
A five-week, full-time introduction to the practice of physical therapy. The application of basic physical-therapy procedures, modalities and patient-management skills will be emphasized in a supervised general-hospital, outpatient, orthopaedic, sports- medicine or industrial-medicine setting. An in-service or case presentation, in addition to a reflective case study will be required during the internship.

**PT 482 / 582** Dr. Kosmahl
**Professional Development** 2 credits
This course is designed to provide the student with the opportunity to explore, in increasing depth, an area of professional interest. A contract drawn between student and advisor is required. Optional.

**PT 490** Prof. Wagner
**Clinical Education Seminar III** 1 credit
These weekly discussions will further prepare students for their subsequent internships and ongoing professional practice. Goals, objectives, expectations and responsibilities of Internship II will he clarified. Topics will include an analysis of individual learning and personality styles, assertiveness training, and increased awareness of the cognitive influences on behavior. Case presentations will be used to promote the development of clinical problem-solving skills. This course includes a service learning component.

**PT 493** Dr. Sanko
**Introduction to Research** 3 credits
Introduction to research including design selection, general concepts of data collection and analysis, and the critical review of literature relevant to the field of physical therapy. Students are required to formulate a research hypothesis and submit a formal research proposal. Methods of research presentation are discussed. 3-hour lecture/week.

**PT majors with graduate status in PT program:**

**PT 555** Prof. Hakim
**Correlative Rehabilitation** 4 credits
This course is designed to integrate background knowledge and clinical practice in the areas of: ICU management, wound management, orthotics, prosthetics, oncology, head injury, speech/language, and spinal cord injury. Evaluation, treatment and documentation issues are addressed as they pertain to each area. Concepts of impairment, disability, and handicap are discussed in relation to clinical management and an interdisciplinary approach.

Laboratory experiences focus on treatment planning and application with problem-solving scenarios. Demonstrations, videos, equipment management, and clinical guest lecturers are included. Field trips to local rehabilitation facilities supplement the head-injury and spinal-cord injury modules. 3-hour lecture, 2-hour lab/week.

**PT 556** Profs. Hakim, Grant
**Motor Control/Motor Learning** 3 credits

This course introduces the science of motor control/motor learning including neuromotor processes that underlie normal and abnormal movement. Theories of motor learning and mechanisms of acquisition of movement are discussed. Neuromotor and neuropsychological research is investigated and clinical implications are discussed. 2 hours lecture, 2-hour lab/week.

**PT 580** Profs. Wagner, Hakim
**Internship II** 3 credits

A six-week, full-time intermediate level of physical-therapy practice. The application of more highly developed therapeutic skills and techniques will be emphasized in a supervised general-hospital, out-patient, orthopaedic, sports-medicine, pediatric, industrial-medicine, home-care, or private practice setting. An in-service or case presentation, in addition to a reflective case study, will be required during the internship.

**PT 581** Profs. Wagner, Hakim
**Internship III** 12 credits

Two eight-week, full-time advanced-level internships. Increased independence and decision-making skills will be stressed in supervised general-hospital, out-patient, orthopaedic, sports-medicine, industrial-medicine, rehabilitation, private-practice or in a student's "specialized" settings. Emphasis will focus on the integration of all didactic coursework directed at the goal of achieving "entry-level" clinical competence. An administrative project, case presentation or individual project, in addition to a reflective case study, will be required during each internship.

**PT 584** Dr. Sanko
**Special Topics in Health Care** 2 credits

A discussion-centered course, the content will include the more contemporary issues in health care delivery. Emphasis on the provision of physical-therapy services will be covered. 2 hours lecture/week.

**PT 590** Prof. Wagner
**Clinical-Education Seminar IV** 1 credit

The last in the series of clinical seminars, these monthly meetings will focus on establishing goals, objectives, expectations and responsibilities of the final two, full-time "specialty" internships. Guidance for the selection of specialized sites will be available. Students will be required to develop individual "learning contracts" to foster optimal outcomes in the clinical setting. Information and assistance will be provided to prepare students for state-licensing examinations. Questions and concerns regarding employment options will be addressed.

**PT 593** Dr. Sanko
**Research Design and Implementation** 2 credits

Students refine and implement the research proposals submitted in PT 493. The collection of data with appropriate statistical analysis is completed and a formal written presentation in approved format of the methods, results, and conclusion is required. All research initiated is subject to the rules and policies of the University with regard to the human or animal subjects.

# Dexter Hanley College

The Dexter Hanley College has been providing quality education for adult students for over 75 years. Dexter Hanley College continues this tradition of student-centered administration that supports adults in achieving their academic goals.

Dexter Hanley College provides services for visiting students, students in grades six through twelve, as well as continuing full-time and part-time students. Additionally, Dexter Hanley College administers the University's evening, intersession, summer sessions, condensed, and travel courses.

# MISSION STATEMENT

Dexter Hanley College, the undergraduate college for adult and non-traditional students, is committed to carrying on the Jesuit tradition by offering quality programs, quality services and the opportunity for students to reach their educational goals. Dexter Hanley College is dedicated to serving the local community and continually updates its programs and services in response to the community's ever-changing needs. The degree earned by DHC students and the faculty who teach for DHC are the same as for the other University of Scranton undergraduate colleges.

Dexter Hanley College serves primarily the following seven groups:

1. Adults who wish to pursue an undergraduate degree
2. Students who wish to pursue an undergraduate degree on a part-time basis or attend evenings only
3. Students who want to obtain an associate degree or certificate
4. Adults who want to improve their professional competence and/or to prepare themselves for new careers
5. Adults who want to take advantage of educational programs for their own enrichment
6. Students in grades six through twelve who want to prepare for college, take college-level courses, or participate in enrichment programs
7. Visiting students from other colleges and universities

Dexter Hanley College is dedicated to helping students succeed by offering scholarship opportunities, life-experience credits, academic and career counseling, and academic support services.

# DEGREE PROGRAMS

Dexter Hanley College students may attend courses offered in the day or at night. Students who can attend courses scheduled for mornings and afternoons may choose from degree programs in Group 1 or Group 2. Students who plan to attend only in the evening may select from Group 2.

Group 1: In general, courses that comprise the **major** for these degree programs are offered during the daytime only.

## BACHELOR'S DEGREE

Biochemistry
Biology
Biophysics
Chemistry
Chemistry/Business*
Chemistry/Computers*
Computer Engineering*
Computer Science*
Early Childhood Education*
Elementary Education*
Secondary Education*
Electrical Engineering*
Electronics/Business*
Exercise Science
English*
Environmental Science
Foreign Languages
Gerontology*
International Business*
International Language Business*
International Studies*
Mathematics
Medical Technology
Neuroscience
Nursing*
Physical Therapy
Physics
Pre-Engineering
Political Science*
Psychology
Special Education*
Theatre

## ASSOCIATE DEGREE

Electrical Engineering*
Computer Engineering

*Some courses in this major are available evenings.

Group 2: **Major , cognate** and **general education** courses for these degrees are available either night or day.

| BACHELOR'S DEGREE | | ASSOCIATE DEGREE |
|---|---|---|
| Accounting | Human Services | Associate in Arts |
| Communication | Liberal Studies | Business |
| Computer Info. Systems | Management | Computer Information Systems |
| Criminal Justice | Marketing | Criminal Justice |
| Economics | Nursing for R.N.s | Gerontology |
| Finance | Operations Management | Health Administration |
| Health Administration | Philosophy | Human Services |
| History | Sociology | Political Science |
| Human Resources Studies | Theology/Religious Studies | Sociology |

The Dexter Hanley College baccalaureate programs have the same general-education requirements as the corresponding programs in The College of Arts and Sciences, The Kania School of Management, and The Panuska College of Professional Studies. It should be noted, however, that the physical-education requirement is waived for Dexter Hanley College students.

Curricular requirements for each degree program will be found on pages indicated in the index at the back of this catalog. Math-placement testing may determine additional math prerequisites in addition to those specified by a degree program.

# ADMISSION INFORMATION

## APPLICATION FOR ADMISSION

Admission to The Dexter Hanley College at The University of Scranton is based on the applicant's academic record, life experiences and motivation to continue education. Application forms may be obtained from the Admissions Office for Adult, Part-Time and Transfer Students or may be requested by phone (570) 941-5813, Fax (570) 941-5819. Additional information is available on the web at http://academic.uofs.edu/department/dhc/

The Admissions Office operates on a rolling admissions plan which processes applications on a continual basis as received. All candidates are informed of the admission decision within two weeks after the completion of their files of supporting credentials.

To complete the application file, the candidate must have the following sent to the Office of Admission for Adult, Part-Time and Transfer Students:

1. A completed application form accompanied by the $20.00 application fee;

2. An official high school transcript (and Graduate Equivalency Diploma (GED), including scores, when applicable).

Official transcripts of high school and previous college courses (where applicable) must be submitted to the Admissions Office not later than three weeks before the beginning of classes each semester so that the student may be considered for official admission to the College. Applicants with a minimum of 15 earned credits from an accredited college or university do not need to submit high school transcripts or GED scores.

Appointments to meet with the Director of Admissions prior to registration may be made by contacting the Office of Admissions for Adult, Part-Time and Transfer Students at (570) 941-5813.

## ADMISSION OF TRANSFER STUDENTS

Under the rolling admissions plan, transfer candidates may be considered on the basis of their last semester's courses and previous work at an accredited college or university. Students who have been dismissed from another institution cannot apply to the University of Scranton any sooner than one full semester after the semester in which the dismissal took place. All candidates are informed of the admission decision within two to three weeks after completion of their files of supporting credentials.

To complete the application file, a transfer candidate must have the following sent to the Office of Admissions for Adult, Part-Time and Transfer Students:

1. A completed application form accompanied by the $20.00 application fee.

2. Official high school transcript/GED scores. (Applicants with a minimum of 15 earned credits from an accredited college or university do not need to submit high school transcripts or GED scores.)

3. Official transcripts, mailed directly from every college or university attended.

Official transcripts of high school and previous college courses (where applicable) must be submitted to the Admissions Office not later than three weeks before the beginning of classes each semester so that the student may be considered for official admission to the College.

In general, advanced standing will be granted for previously completed courses when they are equivalent or comparable to courses at the University, the student received grades of C or higher, and the courses meet requirements for the degree program. If the student changes major at a later date, another review of transfer credits will be made at that time, and the student will be given a written evaluation clearly indicating the transfer credits that apply to the new major. In all cases, for a bachelor's degree, transfer students must earn a minimum of 63 credits at the University of Scranton. Once a transfer student matriculates, the University policy on course transfers applies.

## CONDITIONAL ADMISSION

A student may be admitted conditionally if official transcripts have not been received in the Admission Office before classes begin. The student whose official records have not been received within five weeks after classes have begun will not be allowed to register for a subsequent term.

Upon receipt and evaluation of the official academic transcripts, the Admissions Office will notify the student regarding acceptance or rejection. The student who is rejected will be allowed to finish the semester if he/she wishes to do so, but will not be allowed to register for subsequent terms. The student who is accepted will be subject to all rules, regulations and policies of regularly enrolled students. Because official academic transcripts are necessary for effective academic advising, the student who enters under the conditional admission policy takes full responsibility for any errors in course selection and for all extra costs involved in making changes in class registrations.

## DEXTER HANLEY COLLEGE TRANSITION PROGRAM

Dexter Hanley College students who are internal or external probationary acceptances and those students who wish to change major or declare a major but do not have the required grade-point average for acceptance into the new major will be placed into the college transition program. Students will remain in this program until they have achieved the necessary grade points for entrance into the desired major or thirty credits from time of acceptance into the program. This program will include intensive academic advising; cam-

pus-wide referrals for students with special needs; and the opportunity to matriculate in a specific major or use the Liberal-Studies major in preparation for a more generalized approach to career success.

## READMISSION

Once accepted into Dexter Hanley College, a student must maintain continuous enrollment. The dean may approve requests for one, and, on occasion, two consecutive semester leaves of absence. Students who do not attend the University for a semester or more, without an approved leave of absence, may be required to complete a full application for readmission. This may also result in a student's needing to fulfill new curricular requirements. To apply for re-admission, contact Dexter Hanley College directly, not the Admissions Office.

## UNIVERSITY OF SCRANTON/MARYWOOD UNIVERSITY CROSS REGISTRATION

After completing 30 credits at the University of Scranton, Dexter Hanley College full-time students in good academic standing may take two courses (equivalent to six credits) at Marywood during the calendar year (January-December). Part-time students can take one Marywood course for every five University of Scranton courses for a maximum of six Marywood courses.

## ADMISSION OF SPECIAL STUDENTS

Special students include those who have already completed B.A. or B.S. degrees at the University of Scranton or another institution, visiting students (matriculated at another institution), part-time students taking courses for "self-improvement," and those admitted to Certificate Programs. Admission as a special student does not imply admission to candidacy for a degree. Special students must complete the application process for Dexter Hanley College.

## SECOND BACCALAUREATE DEGREE

University of Scranton graduates and persons with good scholastic records and a baccalaureate degree from a regionally accredited institution, who wish to earn a second baccalaureate degree at The University of Scranton, must apply to Dexter Hanley College.

Candidates for a second baccalaureate degree are expected to complete a minimum of 30 credits at The University of Scranton beyond the completion of the studies for the first degree, of which at least 15 credits must be in the second degree's major. Students must complete all requirements for the second degree not covered by the first degree program for the major and cognate. All prerequisites for major and cognate courses must also be completed.

No semester hours from the first baccalaureate degree can be used toward this 30 credit requirement. Grades for courses taken by University of Scranton graduates after completion of the requirements for the first baccalaureate degree will have no effect on the final grade-point average of the first degree.

**Graduates of a University of Scranton baccalaureate degree who wish to obtain a second University of Scranton baccalaureate are eligible for a 50% tuition discount.**

## CERTIFICATE PROGRAMS

Students wishing to complete a certificate program in Dexter Hanley College must meet the requirements specified by the appropriate department.

## SELF-IMPROVEMENT

Students who do not plan to work toward a degree or a certificate must also file the application for admission and must arrange for official transcripts to be sent to the Dexter Hanley College Office.

## VISITING STUDENTS

Students matriculated in other colleges or universities who wish to take courses for credit at The University of Scranton should present the written approval of their dean or other authorized administrator for all courses taken at The University of Scranton. The University of Scranton does not guarantee transferability of its courses. **Reader courses are not available for visiting students.**

Visiting students must complete an application form but are not required to submit transcripts. Visiting students taking more than one course in any semester are required to attend orientation.

## READMISSION OF DISMISSED STUDENTS

If a Dexter Hanley College student who has been dismissed from the University of Scranton wishes to apply for readmission to the University, the student may do so no sooner than one full semester after the semester in which the dismissal took place. Readmission is not automatic; the student will need to demonstrate that the conditions which led to dismissal will not present a continuing problem. If a student is dismissed a second time from the University, readmission is not permitted. Students who want to be readmitted need to apply to Dexter Hanley College directly, not to the Admissions Office.

## AUDITORS

Dexter Hanley College students may register as auditors with the approval of the dean. Entry of the audit grade on the transcript assumes satisfactory attendance at class meetings. The student should consult with the instructor as to what constitutes satisfactory attendance. Auditors are not responsible for assigned work, quizzes, or examinations, and they receive no credit for the course. Students not enrolled as auditors who wish to change their status to that of auditor must do so by deadlines specified in the academic calendar on the inside front cover of this catalog. Auditing students pay the regular tuition and fees.

# DEXTER HANLEY COLLEGE ADVISING CENTER

In Dexter Hanley College, academic advising begins with admission interviews, registration and new-student orientations. Ongoing advising services that support students through their years of study to graduation provide all students, including transfer and evening students, with stability and continuity in their academic planning. DHC students are assigned faculty advisors by their choice of major. They are also assisted by staff advisors who are available twelve months a year during day and evening DHC office hours.

A student-use space has been added to the advising center. Here students may use computers to access updated course information and to check their grades and student-account status, and registration.

The staff in Dexter Hanley College, Career Services and the Counseling Center are also available for consultation regarding academic, career and personal issues.

# B.S. IN NURSING FOR R.N. STUDENTS

*DR. DONA RINALDI CARPENTER, Director, R.N. Track*

The registered-nurse student is recognized as an adult learner who comes with a diversity of life experiences, education, and clinical expertise, as well as motivation and ability to learn independently and collaboratively. To facilitate advanced placement, opportunity is provided for students to validate previously acquired educational and clinical competencies.

The nursing program, accredited by the National League for Nursing Accrediting Commission, is open to all registered nurses who meet admission requirements. The registered-nurse student may enroll on either a full-time or part-time basis.

**To apply for admission to the B.S. for R.N. track**, students should submit the following with completed application forms and fees:

1. Official transcripts from high school, nursing school and other colleges attended.
2. A copy of current Pennsylvania Registered Nurse License.

Transcripts are individually reviewed and evaluated. Transfer courses, especially courses in the sciences, must be equivalent to courses in the nursing program at The University of Scranton (science courses taken at a non-degree program are accepted if they were taken at an affiliated college and received college credit); a grade of C or better must have been earned.

**Student Policies: R.N. Track**

1. In order to continue in the nursing program, ordinarily the R.N. student must enroll in a minimum of one course in each regular semester.
2. The R.N. student is expected to complete the degree requirements within seven years from the date of admission. 57 credits in Nursing are required for the degree, 36 of which may be earned by verifying current employment or graduation through an original R.N. program less than 10 years prior to acceptance. The 36 validation credits are posted on the student's official transcript.
3. Students must have completed at least 100 credits prior to enrollment in NURS 481 or 493. Completion of all course work toward the baccalaureate degree is suggested prior to enrollment in NURS 473.
4. Nursing students must achieve a grade of C or better in the major and cognate courses. Once the student is enrolled, all nursing courses must be taken at The University of Scranton.
5. Before students begin clinical work, they must submit copies of their professional malpractice-liability insurance policy, evidence of current licensure and CPR certification.
6. Students who have earned an overall GPA of 3.3 or higher may choose an accelerated track toward the M.S. in Nursing. NURS 510, 591, 593 and 595 may be taken in lieu of NURS 473, 483 and 493. Additional information is available from Dr. Carpenter, Director of the R.N. Track.
7. Dexter Hanley College students will meet the service-learning requirements by completing major courses that have a service-learning component. They will not be required to complete additional service-learning hours.

## SUGGESTED GUIDE TO PROGRAM PLANNING FOR REGISTERED NURSE STUDENTS

| | Dept. and No. | Descriptive Title of Course | Credits |
|---|---|---|---|
| | | **FIRST YEAR** | |
| COGNATE (GE NSCI) | CHEM. 110-111 | Introduction to Chemistry I-II | 6 |
| COGNATE (GE NSCI) | BIOL. 110-111 | Structure and Function I-II | 8 |
| GE SPCH-WRTG | COMM 100-ENGL 107 | Public Speaking-Composition | 6 |
| GE C/IL-QUAN | C/IL 102[1] | Computer and Information Literacy | 3 |
| GE PHIL | PHIL 120[1] | Introduction to Philosophy | 3 |
| GE S/BH | PSYC 110[1] | Fundamentals of Psychology | 3 |
| | | | **29** |
| | | **SECOND YEAR** | |
| MAJOR | NURS 241 | Perspectives in Professional Nursing | 3 |
| MAJOR | NURS 242 | Nursing Related to Assessment of Health Patterns | 3 |
| COGNATE | BIO 210 | Intro. to Medical Microbiology | 3 |
| COGNATE | NUTR | Nutrition | 2 |
| COGNATE(GE QUAN) | PSYC 210 | Psychological Statistics | 3 |
| GE T/RS | T/RS 121 | Theology I | 3 |
| GE PHIL-T/RS | PHIL 210-T/RS 122 | Ethics-Theology II | 6 |
| GE HUMN | ELECTIVES | Humanities Electives | 9 |
| GE S/BH | PSYC 225 | Abnormal Psychology | 3 |
| | | | **35** |
| | | **THIRD YEAR** | |
| MAJOR | NURS | Nursing Validation Credits | 36 |
| GE T/RS | ELECTIVE[1] | T/RS Elective | 3 |
| GE ELECT | PSYCH[2]-ELECT | Childhood & Adolescence-Free Elective | 6 |
| | | | **45** |
| | | **FOURTH YEAR** | |
| MAJOR | NURS 471[3,4] | Community Health Nursing | 3 1/2 |
| MAJOR | NURS 473[4] | Synthesis of Leadership Concepts In Nursing | 3 |
| MAJOR | NURS ELECT | Nursing Elective | 3 |
| MAJOR | NURS 493 | Research in Nursing | 3 |
| MAJOR | NURS 483 | Independent Study | 6 |
| GE HUMN | ELECT | Humanities Elective | 3 |
| GE ELECT | PHIL 212[2]-ELECT | Medical Ethics and/or Free Electives | 6 |
| | | | **27 1/2** |

**Total: 136 1/2 CREDITS**

[1] Fall or spring
[2] Department recommendation
[3] Portfolio option available
[4] Clinical Practicum Fee

# LIBERAL STUDIES

The Liberal Studies major is a highly individualized program offered exclusively through Dexter Hanley College. Applicants who have attended other accredited colleges may transfer up to 60 credits for applicable courses in which a grade of "C" or better has been earned. Students who qualify for this interdisciplinary degree program are eligible to earn as many as 30 semester hours for academically relevant experience.

## DEGREE REQUIREMENTS FOR B.S. IN LIBERAL STUDIES

**General Education**

| | Dept. and No. | Descriptive Title of Course | Credits |
|---|---|---|---|
| | | **FIRST YEAR** | |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 6 |
| GE C/IL | C/IL 102 | Computer and Information Literacy | 3 |
| CE QUAN[1] | MATH ELECT | Math Elective | 3 |
| GE NSCI | NSCI ELECT | Natural Science Electives | 6 |
| GE S/BH | ELECT | Social-Behavioral Electives | 6 |
| GE HUM[2] | ELECT | Humanities Electives | 12 |
| GE T/RS | T/RS 121-122 | Theology I-II | 6 |
| GE PHIL | PHIL 120-210 | Introduction to Philosophy-Ethics | 6 |
| GE T/RS-PHIL | T/RS or PHIL | Elective | 3 |
| GE ELECT | ELECT | Free Electives | 12 |

**TOTAL 63 CREDITS**

**Concentrations**

The student may complete 3 or 4 concentrations, each with no less than 15 and no more than 24 credits.

**TOTAL DEGREE: 126 CREDITS**
**Concentration credits must total 63 credits.**

**NOTES:** All Liberal-Studies students must take two courses designated as Writing-Intensive (W) and two designated as Cultural Diversity (D).

In compliance with terms set by AACSB accreditation, no more than 30 credits of the concentrations may be School of Management courses.

Physical education courses cannot be counted toward the Liberal-Studies degree, with the exception of those courses required within the PHED major.

No minors are granted with the Liberal-Studies program.

No College of Arts and Sciences concentrations are granted within the Liberal Studies program.

[1] If placement testing indicates a need for Math 5, it will be placed in the free elective area.

[2] Students must earn six credits in one humanities field: history, literature or foreign language. The remaining credits must be in any other humanities, which include three credits in Art or Music.

# ASSOCIATE DEGREES

## ASSOCIATE IN ARTS

The Associate in Arts is often classified as the Liberal-Arts "transfer degree" in that it provides the student with a broad exposure to the arts and sciences.

**Degree Requirements for Associate in Arts**

Each candidate for the degree must complete 60 semester hours of credit. Of these, 54 credits must be earned in the liberal arts, according to a prescribed plan covering the humanities, social/behavioral sciences, philosophy, theology/religious studies, and natural sciences/mathematics. The remaining six semester hours are allotted to free electives. Applicants who have attended other accredited colleges may transfer up to 30 credits for applicable courses in which a grade of "C" or better was earned. An outline of the degree credit requirements follows:

**General Education**

| | Dept. and No. | Descriptive Title of Course | Credits |
|---|---|---|---|
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 6 |
| GE C/IL-QUAN | C/IL 102 | Computer and Information Literacy | 3 |
| | MATH ELECT | Math Elective | 3 |
| GE PHIL-T/RS | PHIL 120-T/RS 121 | Introduction to Philosophy-Theology I | 6 |
| GE PHIL-T/RS | PHIL 210-T/RS 122 | Ethics-Theology II | 6 |
| GE S/BH | ELECT | Social-Behavioral Electives | 6 |
| GE NSCI | ELECT | Natural Science Electives | 6 |
| **Major/Cognates** | | | |
| | Electives | Humanities Major Electives | 24 |
| | | **Total: 60 CREDITS** | |

## ASSOCIATE DEGREES IN CAREER-RELATED FIELDS

The Associate of Science degree in career-related fields has been designed as the natural companion to the Bachelor of Science degrees in those majors. Course requirements follow:

## BUSINESS

**General Education**

| | Dept. and No. | Descriptive Title of Course | Credits |
|---|---|---|---|
| GE QUAN/ELECT | MATH 106[1]-MATH 107 | Quantitative Methods I-II | 6 |
| GE ELECT | ELECT | Free Elective | 3 |
| GE S/BH | ECO 153-154 | Principles of Micro-Macro Economics | 6 |
| GE WRTG | WRTG 107 | Composition | 3 |
| GE SPCH | COMM 100 | Public Speaking | 3 |
| GE C/IL | C/IL 102 | Computer and Information Literacy | 3 |
| GE HUM | ELECT[2] | Humanities Electives | 9 |
| GE PHIL | PHIL 120 | Introduction to Philosophy | 3 |
| GE T/RS | T/RS 121 | Theology I | 3 |
| GE PHIL or T/RS | PHIL210 or T/RS 122 | Ethics or Theology II | 3 |
| **Major/Cognates** | | | |
| | MGT 161 | Introduction to Business | 3 |
| | ACC 253-254 | Financial/Managerial Accounting | 6 |
| | STAT 251-252 | Statistics for Business, I-II | 6 |
| | MGT 251 | Legal Environment of Business | 3 |
| | | **Total: 60 CREDITS** | |

[1] Math placement testing may determine additional math prerequisites in addition to the math specified for this degree program.
[2] Must take two (2) courses in history, literature, or foreign language. The other three credits will be in one of the other two areas including Art and Music

**NOTE:** Students who complete the associate degree in business and wish to continue toward the B.S. in Accounting, Economics, Finance, Management, Marketing, or Operations Management, must have attained a 2.0 in major and cognate courses and an overall G.P.A. of 2.0.

## COMPUTER ENGINEERING

**General Education**

| | Dept. and No. | Descriptive Title of Course | Credits |
|---|---|---|---|
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 6 |
| GE C/IL | C/IL 102 | Computer and Information Literacy | 3 |
| GE PHIL-T/RS | PHIL 120-T/RS 121 | Introduction to Philosophy-Theology I | 6 |
| GE HUM | ELECT | Humanities Electives | 6 |
| GE S/BH | ELECT | Social-Behavioral Elective | 9 |
| | | | **30** |

**Major /Cognates**

| | | |
|---|---|---|
| PHYS 140-141 | Elements of Physics I-II | 8 |
| PHYS 243L | | 2 |
| PHYS 270 | Elements of Modern Physics | 4 |
| MATH 103*-114 | Pre-Calculus-Analysis I | 8 |
| MATH 142 | Discrete Structures | 4 |
| MATH 221-222 | Analysis II-III | 8 |
| CMPS134 | Computer Science I | 3 |
| CMPS 144 | Computer Science II | 4 |
| CMPS 240 | Data Structures | 3 |
| CMPS 250 | Machine Organization and Assembly Language Programming | 3 |
| ENGR 250 | Statistics | 3 |
| E/CE 240 | Introduction to Digital Circuits | 3 |
| E/CE 340 | Digital Systems | 3 |
| EE 241 | Circuit Analysis | 4 |

**Total: 90 CREDITS**

*Math placement testing may determine additional math prerequisites in addition to the math specified for this degree program.

## COMPUTER INFORMATION SYSTEMS

**General Education**

| | Dept. and No. | Descriptive Title of Course | Credits |
|---|---|---|---|
| GE C/IL | C/IL 102 | Computer and Information Literacy | 3 |
| GE QUAN | MATH 142 | Discrete Structures | 4 |
| GE S/BH | ECO 153 | Principles of Micro Economics | 3 |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 6 |
| GE HUMN | ELECT | Humanities Electives | 9 |
| GE PHIL-T/RS | PHIL 120-T/RS 121 | Introduction to Philosophy-Theology I | 6 |
| GE PHIL-T/RS | PHIL 210 OR T/RS 122 | Ethics or Theology II | 3 |
| GE ELECT | ELECT | Free Elective | 6 |
| | | | **40** |

**Major /Cognates**

| | | |
|---|---|---|
| CMPS 134, 144 | Computer Science I, II | 7 |
| MATH 204 or STAT 251 | Special Topics of Statistics or Statistics for Business I | 3 |
| CMPS 240 | Data Structures | 3 |
| CMPS 250 | Machine Organization & Assembly Language Programming | 3 |
| CMPS 330 | Information Systems | 3 |
| CMPS 340 | File Processing | 4 |
| | | 23 |

**Total: 63 CREDITS**

Math placement testing may determine additional math prerequisites in addition to the math specified for this degree program.
ECO 154 is recommended

## CRIMINAL JUSTICE

**General Education**

| | Dept. and No. | Descriptive Title of Course | Credits |
|---|---|---|---|
| GE NSCI | PHYS 107[1] | "Hands On" Physics | 3 |
| GE NSCI | ELECT | Natural-Science Elective | 3 |
| GE S/BH | SOC 110 | Introduction to Sociology | 3 |
| GE S/BH | PSYC 110 | Fundamentals of Psychology | 3 |
| GE S/BH | PS 131[1] | American National Government II or | |
| | SOC 112[1] | Social Problems | 3 |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 6 |
| GE C/IL | C/IL 102 | Computer and Information Literacy | 3 |
| GE HUM | ELECT[2] | Humanities Electives | 9 |
| GE PHIL -T/RS | PHIL 120-T/RS 121 | Introduction to Philosophy-Theology I | 6 |
| GE PHIL-T/RS | PHIL 210 or T/RS 122 | Ethics or Theology II | 3 |
| GE ELECT | ELECT | Free Elective | 3 |
| | | | **45** |

**Major/Cognates**

| | | |
|---|---|---|
| CJ 110 | Introduction to Criminal Justice | 3 |
| S/CJ 210 | Law and Society | 3 |
| S/CJ 212 | Criminological Research | 3 |
| S/CJ 213 | Criminology | 3 |
| Major | Electives | 6 |

**Total: 63 CREDITS**

[1] Recommended courses.
[2] This could also be used for **writing-intensive** and/or **cultural-diversity** credit.

## ELECTRICAL ENGINEERING

**General Education**

| | Dept. and No. | Descriptive Title of Course | Credits |
|---|---|---|---|
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 6 |
| GE C/IL | C/IL 102 | Computer and Information Literacy | 3 |
| GE PHIL - T/RS | PHIL 120-T/RS 121 | Introduction to Philosophy-Theology I | 6 |
| GE HUM | ELECT | Humanities Elective | 3 |
| GE S/BH | ELECT | Social-Behavioral Elective | 3 |
| | | | **21** |

**Major/Cognates**

| | | |
|---|---|---|
| PHYS 140-141 | Elements of Physics I-II | 8 |
| PHYS 270 | Elements of Modern Physics | 4 |
| MATH 103[1]-114 | Pre-Calculus-Analysis I | 8 |
| MATH 221-222 | Analysis II, III | 8 |
| CMPS 134 | Computer Science I | 3 |
| ENGR 250-252 | Statics-Solid State Materials | 6 |
| ENGR 253-254 | Introduction to CAD-3D CAD | 2 |
| EE 240 | Introduction to Digital Circuits | 3 |
| EE 241 | Circuit Analysis | 4 |
| EE 343 | Electronic Circuits I | 3 |
| EE 243L | Digital-System Design Lab | 2 |
| | | 51 |

**Total: 72 CREDITS**

[1] Math placement testing may determine additional math prerequisites in addition to the math specified for this degree program.

## GERONTOLOGY

**General Education**

| | Dept. and No. | Descriptive Ttle of Course | Credits |
|---|---|---|---|
| GE NSCI | CHEM 100[1] | Elements of Chemistry | 3 |
| GE NSCI | ELECT | Natural Science | 3 |
| GE S/BH | SOC 110 | Introduction to Sociology | 3 |
| GE S/BH | PSYC 110 | Fundamentals of Psychology | 3 |
| GE S/BH | PSYC 222[1] or SOC 112 | Adulthood and Aging-or Social Problems | 3 |
| GE SPCH-WRTG | COMM100-WRTG 107 | Public Speaking-Composition | 6 |
| GE C/IL | C/IL 102 | Computer and Information Literacy | 3 |
| GE HUM | ELECTIVES[2] | Humanities Electives | 9 |
| GE PHIL-T/RS | PHIL. 120-T/RS 121 | Introduction to Philosophy-Theology I | 6 |
| GE PHIL-T/RS | PHIL 210 or T/RS 122 | Ethics or Theology II | 3 |
| GE ELECT | ELECT | Free Elective | 3 |
| | | | **45** |

**Major/Cognate**

| | | |
|---|---|---|
| GERO 110 | Introduction to Gerontology | 3 |
| GERO 230 | Social Policy and Aging | 3 |
| GERO 232 | Aging and Death | 3 |
| SOC 211 | Methods of Social Research | 3 |
| ELECTIVES | Gerontology Electives | 6 |
| | | 18 |

**Total : 63 CREDITS**

[1] Recommended courses.
[2] This could also be used for **writing-intensive** and/or **cultural-diversity** credit.

## HEALTH ADMINISTRATION

**General Education**

| | Dept. and No. | Descriptive Title of Course | Credits |
|---|---|---|---|
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 6 |
| GE C/IL | C/IL 102 | Computer and Information Literacy | 3 |
| GE HUM | ELECT | Humanities Electives | 9 |
| GE PHIL-T/RS | PHIL 120-T/RS 121 | Introduction to Philosophy-Theology I | 6 |
| GE PHIL-T/RS | PHIL 210-T/RS 122 | Ethics or Theology II | 3 |
| GE ELECT | ELECT | Free Electives | 6 |
| | | | **33** |

**Major/Cognate**

| | | |
|---|---|---|
| HADM 111 | Introduction to Health Administration | 3 |
| HADM 112 | Health Systems | 3 |
| HADM 312 | Health Finance | 3 |
| HADM 313 | Health Administration | 3 |
| ELECTIVE | HADM Elective | 3 |
| ACC 253-254 | Financial-Managerial Accounting | 6 |
| ELECTIVES | Cognate Electives | 6 |
| | | 27 |

**Total: 60 CREDITS**

Dexter Hanley College students will meet the service-learning requirement by completing major courses that have a service-learning component. They will not be required to complete additional service-learning hours.

**NOTE:** Students who complete the associate degree in Health Administration and wish to continue toward the B.S. in Health Administration must have attained a 2.5 G.P.A. in the major.

# HUMAN SERVICES

**General Education**

| | Dept. and No. | Descriptive Title of Course | Credits |
|---|---|---|---|
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 6 |
| GE C/IL | C/IL 102 | Computer and Information Literacy | 3 |
| GE HUM | ELECT | Humanities Electives | 9 |
| GE PHIL-T/RS | PHIL 120-T/RS 121 | Introduction to Philosophy-Theology I | 6 |
| GE PHIL-T/RS | PHIL 210 or T/RS 122 | Ethics or Theology II | 3 |
| GE QUANT-NSCI | ELECT | Quantitative and Natural-Science | 6 |
| GE ELECT | ELECT | Free Electives | 6 |
| **TOTALS** | | | **39** |

**Major/Cognate**

| | | |
|---|---|---|
| HS 111 | Introduction to Human Adjustment | 3 |
| HS 112 | Human Services Systems | 3 |
| HS 241 | Case Management & Interviewing | 3 |
| HS 242 | Counseling Theories | 3 |
| ELECTIVE | HS Elective | 3 |
| ELECTIVES | Cognate Electives | 6 |
| | | 21 |

**TOTAL: 60 CREDITS**

Dexter Hanley College students will meet the service-learning requirement by completing major courses that have a service-learning component. They will not be required to complete additional service-learning hours.

**NOTE:** Students who complete the associate degree in human services and wish to continue toward the B.S. in human services must have attained a 2.5 G.P.A. in the major, and a 2.0 in the cognates.

## POLITICAL SCIENCE

To earn the Associate of Science degree in Political Science the student must successfully complete 60 semester hours of credit. Of these, 48 credits must be earned in the liberal arts, according to a prescribed plan covering the humanities, philosophy, theology/religious studies, social/behavioral sciences, and natural sciences/mathematics. Twelve additional credits must be earned in the major field. The remaining six semester hours are allotted to free electives in either the area of specialization or any other field. An outline of the degree credit requirement is provided below.

**Credits Required by Area of Study**

**General Education**

| | Dept. and No. | Descriptive Title of Course | Credits |
|---|---|---|---|
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 6 |
| GE C/IL | C/IL 102 | Computer and Information Literacy | 3 |
| GE NSCI-QUAN | ELECT | Natural Science-Math Electives | 6 |
| GE PHIL-T/RS | PHIL 120-T/RS 121 | Introduction to Philosophy-Theology I | 6 |
| GE PHIL-T/RS | PHIL 210 or T/RS 122 | Ethics or Theology II | 3 |
| GE S/BH | ELECT | Social-Behavioral Electives | 9 |
| GE HUM | ELECT | Humanities Electives | 9 |
| GE ELECT | ELECT | Free Electives | 6 |
| | | | 48 |

**Major**

| | | | |
|---|---|---|---|
| | PS 130-131 | American National Government I-II | 6 |
| | ELECTIVES | PS Electives | 6 |
| | | | 12 |

**TOTAL: 60 CREDITS**

## SOCIOLOGY

**General Education**

| | Dept. and No. | Descriptive Title of Course | Credits |
|---|---|---|---|
| GE NSCI | PHYS 107[1] | "Hands On" Physics | 3 |
| GE NSCI | ELECT | Natural-Science Elective | 3 |
| GE S/BH | PSYC 110 | Fundamentals of Psychology | 3 |
| GE S/BH | ELECT[2] | Social-Behavioral Electives | 6 |
| GE SPCH-WRTG | COMM 100-WRTG 107 | Public Speaking-Composition | 6 |
| GE C/IL | C/IL 102 | Computer and Information Literacy | 3 |
| GE HUM | ELECT[3] | Humanities Electives | 9 |
| GE PHIL-T/RS | PHIL 120-T/RS 121 | Introduction to Philosophy-Theology I | 6 |
| GE PHIL-T/RS | PHIL 210-T/RS 122 | Ethics or Theology II | 3 |
| GE ELECT | ELECT | Free Elective | 3 |
| | | | 45 |

**Major/Cognate**

| | | | |
|---|---|---|---|
| | SOC 110 | Introduction to Sociology | 3 |
| | SOC 112 | Social Problems | 3 |
| | SOC 211 | Methods of Social Research | 3 |
| | SOC 231 | Urban Sociology | 3 |
| | SOC 318 | Sociological Theory | 3 |
| | ELECTIVE | Sociology Elective | 3 |
| | | | 18 |

**TOTAL: 63 CREDITS**

[1] Recommended.
[2] Gero 110 or CJ 110 or PS 130 recommended.
[3] This could also be used for **writing-intensive** and/or **cultural-diversity** credit.

## CERTIFICATES FOR ACADEMIC CREDIT

A Certificate Program is an educational opportunity to gain professional knowledge or training in a specific field before or after pursuing a degree. Students enroll in the undergraduate certificate programs with a variety of educational backgrounds ranging from having completed no college work to having earned a degree.

The courses a certificate student takes are part of the regular curriculum of the University. Certificate programs are comprised of eight academic credit courses that are recorded permanently on a transcript. Some certificates also include guided learning experiences.

In order to earn a certificate, a student must maintain at least a C average in the certificate courses and must successfully complete any other requirements as stipulated for a specific certificate program. Generally, no more than six credits may be transferred into a certificate program.

Application to a certificate program is made through the Director. After a student's application is approved, the student is accepted into the program and may then register. A student is responsible for conferring with an advisor before registering and as needed in the course of earning the certificate.

In certain certificate programs, the required courses may be waived on the basis of prior experience.

Certificates available include Advertising/Public Relations, Chemical Abuse Counseling, Computer Information Systems, Drama/Theatre, Gerontology, Health Administration, and Human Services. The Business/Management certificates are Level I: Business; Level II: Accounting, Personnel Management, and Pre-MBA.

Students enrolled in a 24-credit certificate program, taking at least three credits per semester, may be eligible for financial aid. The Financial Aid Office should be contacted for further details.

## CERTIFICATE IN ADVERTISING/PUBLIC RELATIONS *

**(24 credits)**

A program designed for adults who are seeking entry-level or advancement opportunities in advertising, promotion and public relations. Students with life-experience in advertising, promotion or public relations may wish to take the more advanced courses. An advisor should be consulted before doing so.

**Required Courses:**

COMM 120 Mass Communication
COMM 224 Newswriting (or COMM 324 Advanced Newswriting)
COMM 225 Advertising (or COMM 325 Advanced Copywriting)
COMM 226 Writing for Public Relations (or COMM 227 Public Relations)

**Elective Courses (select four):**

COMM 110 Interpersonal Communication
COMM 220 Responsibility in Communication
COMM 222 Television Production
COMM 227 Public Relations
COMM 311 Political Communication
COMM 312 Organizational Communication
COMM 314 Legal Communication
COMM 323 TV Journalism
COMM 324 Advanced Newswriting
COMM 325 Advertising Copywriting
COMM 326 Political Advertising
COMM 327 Public-Relations Cases
COMM 328 News Editing
COMM 329 Graphics
COMM 331 Mass-Media Management
COMM 334 Broadcast Programming
COMM 380 Advertising Practicum
COMM 410 Communication Theory & Research
COMM 411 Persuasion and Propaganda
COMM 425 Cable television
COMM 481 Internship
COMM 482 Directed Independent Study

*Some daytime courses will be required.

## CERTIFICATE IN CHEMICAL-ABUSE COUNSELING

**(24 credits)**

A program designed for individuals interested in the field of substance-abuse intervention. This program also has been approved by the Pennsylvania Chemical Abuse Certification Board for 45 hours toward certification, or 30 hours toward recertification.

NOTE: Completion of this certificate program alone is only one of several criteria for state certification. State certification requires combinations of work experience, education, and examinations as specified for each level of certification. Detailed information is available in the Dexter Hanley College office.

**Required Courses:**

HS 241 Case Management and Interviewing
HS 242 Counseling Theories
HS 421 Addictions
HS 422 Substance-Abuse Education
HS 423 Health and Legal Aspects of Substance Abuse

**Elective Courses (select three courses):**

HS 112 Human Service Systems
HS 323 Psychiatric Rehabilitation
HS 331 Health & Behavior
HS 334 Marital & Family Counseling
HS 341 Group Dynamics
HS 441 Crisis Intervention

**NOTE:** Students who complete the certificate in Chemical-Abuse counseling and wish to continue toward the associate or B.S. degree in Human Services must have attained a 2.5 G.P.A.

## CERTIFICATE IN COMPUTER-INFORMATION SYSTEMS

**(24 credits)**

This program is designed to introduce individuals to computers, and to expand the required math and programming skills needed for data analysis. The program targets:

1. Individuals presently in business who need to develop a greater familiarity with computer applications.
2. Individuals who are seeking to develop entry-level skills necessary for business computing.

**Required Courses:**

MATH 142 Discrete Structures *
CMPS 134 Computer Science I
CMPS 144 Computer Science II
CMPS 330 Information- Systems Analysis
CMPS 340 File Processing

**Electives: (select 2 courses):**

CMPS 240 Data Structures
CMPS 331 Systems Analysis and Design
CMPS 341 Database Systems

* Some prerequisite courses may be required, as determined by math-placement testing.

## CERTIFICATE IN GERONTOLOGY*

**(24 credits)**

A program designed to meet the needs of persons either currently employed in the field of aging by providing course work designed to increase and refine knowledge and practitioner skills (ADVANCED CERTIFICATE PROGRAM); or for persons with some previous college experience who are considering a career in the field of Gerontology.

**BASIC**

**Required Courses:**

GERO 110 Intro. to Gerontology
GERO 230 Social Policy & Aging
GERO 232 Aging & Death

**Electives (select five courses):**

GERO 112 Social Problems of Aging
GERO 212 Aging & the Life Cycle
GERO 214 Aging & Human Behavior
GERO 216 Aging & The Community
GERO 218 Health & Aging* *
GERO 220 Crime & Aging

**ADVANCED**

**Required Courses:**

GERO 110 Intro. to Gerontology
GERO 218 Health & Aging

**Electives (select six courses):**

GERO 112 Social Problems of Aging
GERO 210 Aging Around the World
GERO 212 Aging & The Life Cycle
GERO 214 Aging & Human Behavior
GERO 216 Aging & The Community
GERO 220 Crime & Aging
GERO 230 Social Policy and Aging
GERO 232 Aging & Death
GERO 382 Independent Study
GERO 480, 481 Practicum in Gerontology

* Some daytime courses may be required.
**Recommended

## CERTIFICATE IN HEALTH ADMINISTRATION

**(24 credits)**

A program for adults who seek to develop administrative skills in the field of health administration.

**Required Courses:**

HADM 111 Introduction to Health Administration
HADM 112 Health Systems
HADM 213 Supervising Health Professionals
HADM 312 Health Finance
HADM 313 Health Administration
HADM Electives (9 credits)

**NOTE:** Students who complete the Certificate in Health Administration and wish to continue toward the associate or B.S. degree in Health Administration must have attained a 2.5 G.P.A.

## CERTIFICATE IN HUMAN SERVICES
**(24 credits)**

A program for individuals who seek to develop skills in and familiarity with human-services systems and interventions.

**Required Courses:**

HS 111 Introduction to Human Adjustment
HS 112 Human-Services Systems
HS 241 Case Management and Interviewing
HS 242 Counseling Theories
HS 441 Crisis Intervention
HS Electives (9 credits)

**NOTE:** Students who complete the Certificate in Human Services and wish to continue toward the associate or B.S. degree in Human Services must have attained a 2.5 G.P.A.

## CERTIFICATE PROGRAMS IN BUSINESS/MANAGEMENT

### LEVEL I

The Level I Certificate Program in Business will comprise 24 credits, with no more than six credits allowed by way of transfer from another college. The Level I program is open to any qualified students (i.e., those who meet the College entrance requirements).

### BUSINESS
**(24 credits)**

| | |
|---|---|
| MGT 161 | Introduction to Business |
| ACC 253, 254 | Financial Accounting — Managerial Accounting |
| ECO 153, 154 | Principles of Microeconomics, Macroeconomics |
| MGT 251 | Legal Environment of Business |
| C/IL 102 | Computer and Information Literacy |
| Free Elective | (Advisor Approved) |

### LEVEL II

Level II certificate programs will comprise 24 credits, with no more than six credits allowed by way of transfer from another approved college. Level II programs are open only to students who have achieved junior status, and have completed the appropriate Level I program, or to post-baccalaureate self-improvement students. In the latter case, students may be required to take prerequisite courses for any required courses in the certificate program.

The Level II certificate in Accounting, plus an earned baccalaureate degree, provides the student with adequate course work to meet Pennsylvania's requirement to sit for the C.P.A. examination. However, both New York and New Jersey require additional credits in Finance (six credits) and Business Law (six credits) to sit for the exam. (For one of the additional courses in Finance, one of FIN 361, 362 or 475 is recommended. One of these courses could be taken as the Free Elective in Level I.) Students should consult an advisor in the School of Management to ensure that they take the correct courses to satisfy the requirements of states other than Pennsylvania.

## ACCOUNTING
**(24 credits)**

ACC 251, 252 Financial Accounting I, II
ACC 361, 362 Intermediate Accounting I, II
ACC 363, 364 Federal Taxes – Auditing Theory
ACC 461, 470 Cost Accounting – Law for Accountants

## PERSONNEL MANAGEMENT
**(24 credits)**

MGT 351 Principles of Management I
MGT 352 Principles of Management II
MGT 361 Personnel Management
MGT 362 Employee-Management Relations
MGT 460 Organization Theory
MGT 471 Group Dynamics
Free electives Six credits, approved by advisor.

## PRE-MBA
**(24 credits)**

*Students should have basic computer knowledge before beginning this program.*

ACC 210 Survey of Managerial & Financial Accounting (or ACC 253 & 254)
ECO 210 Essentials of Economic Theory (or ECO 153 & 154)
FIN 351 Introduction to Finance
MKT 351 Intro. to Marketing
MGT 251 Legal Environment of Business
MGT 351 Principles of Management
OIM 210 Quantitative Methods I (or MATH 106 & 107)
OIM 211 Quantitative Methods II (or STAT 251 & OIM 351)

## TELECOURSES

Telecourses provide students with an opportunity to study with a more flexible schedule. Courses are normally shown one hour per week on the regional PBS affiliate, WVIA-TV. Meetings with instructors are reduced from the typical three hours per week to no more than six meetings per semester. These courses are geared to highly motivated students capable of doing independent work. (Courses offered vary each semester.)

## CREDIT FOR ACADEMICALLY RELEVANT LEARNING

Dexter Hanley College provides opportunities for students to earn credit for university-level learning that takes place outside the classroom setting. A maximum of 30 credits will be awarded for extra-institutional learning, excluding military credit. This includes CLEP, PEP, ACT, portfolio credit, and PONSI credit. (Advanced-placement credit is considered separately.)

### College-Level Examination Program (CLEP)

The College-Level Examination Program has been established to enable students of all ages to earn college credit by examination. Through the CLEP tests, applicants may gain credit in many academic subjects applicable to their degree programs. Individuals who wish further information about these examinations should consult the Dexter Hanley College Director of Advising or write directly to the Program Director, College-Level Examination Program, College Entrance Examination Board, Box 1824, Princeton, N.J. 08540.

**Assessment of Prior Learning**

Many students have acquired "experiential learning" outside a formal college or university classroom in jobs, military service or non-accredited institutions. One who wishes to have this learning assessed for possible credit will enroll in the one-semester course, EDUC 101, to document relevant experiences and the knowledge gained from them for departmental review. Faculty evaluators from the appropriate department(s) should evaluate the portfolio and may recommend a credit award for the student's learning. For further information about this program, contact a Dexter Hanley College advisor (941-7580).

**EDUC 101** Dr. Adams
**Fundamentals of Adult Development and Experiential Learning** 3 credits
The course provides learners with a basic knowledge of adult learning and development theories as a framework for understanding themselves as learners. Through self-assessment of their learning styles, personality factors, value systems, interests, and previously acquired learning, they will gain an understanding of the factors which facilitate and/or inhibit their pursuit of higher learning. This course also assists learners in developing a portfolio of their learning experiences to be reviewed for college. Dexter Hanley students only: permission of instructor required.

## ACADEMIC REGULATIONS

**Sequences of Study/Prerequisites**

Students enrolled in degree programs in Dexter Hanley College are strongly advised to follow the sequence of studies listed for their chosen major as closely as possible. So students may be assured of having the adequate background for the successful completion of certain courses, prerequisite courses are sometimes listed. The course descriptions in the earlier pages of this bulletin contain the necessary information on prerequisites. In some cases practical experience may compensate for the lack of prerequisite courses, but such requests for exceptions must be approved by the departmental advisor. Students should also check with their departments for specific scheduling information on course sequences in their major. Since not all required courses are offered each semester, careful planning should be done in advance to assure smooth progress through the degree program.

Hanley College students should consult this catalog for academic regulations common to all four undergraduate colleges of the University. They should be aware of the following policies which relate specifically to those enrolled in Dexter Hanley College:

**Dean's List**

Since many students in Dexter Hanley College are enrolled on a part-time basis, the Dean's List criteria for this school differ somewhat from those of the day schools. Students in DHC may earn Dean's List distinction provided they carry at least two courses (at least six credits) during the semester and earn at least a 3.50 grade-point average with no grade code of NG, I, C-, D+, D, F or U. The Dean's List is published at the end of the fall and spring terms each year.

**CAMPUS LIFE**

Students should consult the Dexter Hanley College Student Handbook for information about such practical matters as I.D. cards, parking permits and opportunities for participation in various aspects of University life. Dexter Hanley College participation in campus government is provided though the Dexter Hanley College Student Government and through Dexter Hanley College representation on the University Senate.

## TUITION AND FEES 2000-2001

| | | |
|---|---|---|
| Dexter Hanley College Tuition: (full-time) | $515 | per credit |
| (part-time) | $431 | per credit |
| (all Intersession courses) | $515 | per credit |
| University Fee for Hanley Students: (full-time) | $475 | per semester |
| (part-time) | $35 | per semester |
| I.D. Photo | $20 | |
| Schedule Change Fee | $15 | |
| Health-Service Fee (full-time) | $65 | per semester |
| Recreational Complex Use Fee (optional for part-time students): | $82 | per semester |
| Application Fee for Hanley Students: | $20 | |
| Orientation Fee for Hanley Students: | $30 | |
| Prior-Learning-Portfolio Review Fee: | $30 | per credit |
| Credit by Exam: | $75 | per credit |
| Prerequisite challenge exam: | $15 | |
| Nursing Clinical Practicum: | $110 | per clinical course |

The orientation fee is refunded only when a student withdraws from the University prior to orientation.

> Full-time students in Dexter Hanley College who can justify having the recreational and athletic (both parts of the University fee) and health services fee waived may petition the Dean of the College in writing for a waiver. This must be done each semester.

Full-time students who drop to part-time status after the 100% refund deadline will not have an adjustment in tuition and fees for the semester.

### FAMILY TUITION REDUCTION

Whenever at least one dependent child from a family or a spouse is in attendance at the University as a full-time undergraduate student, a special family tuition-reduction policy will apply to a parent/spouse enrolled as a full-time student in Dexter Hanley College. The amount of tuition credit that will be awarded each semester will be calculated after other financial aid has been applied by the Bursar's Office personnel. Forms and additional information may be obtained from the Bursar's Office or from Dexter Hanley College.

### TUITION POLICY FOR SENIOR CITIZENS

Persons 60 years of age or older may audit undergraduate courses at the University through Dexter Hanley College at no tuition charge on a "space-available" basis. Fees and other costs of courses (e.g., textbooks) are assessed at the normal rate. The student must complete the senior-citizen-tuition waiver form and the registration process, including returning the remittance form.

Persons 60 years of age or older may take undergraduate courses for credit through Dexter Hanley College at 50 percent tuition. These reductions are applicable only after the person has applied for and received any form of financial assistance normally available (e.g., state and federal assistance, and employer reimbursement). The student must complete the senior-citizen-tuition waiver form and the registration process, including returning the remittance form.

Senior-citizen students must complete the full application process, including submission of all official transcripts.

### University of Success

Each year 20 seventh-grade students from local school districts are selected to participate in the University of Success program. Students with a C-B grade average and who are academically able to achieve higher grades are typically selected for the program. Students who come from economically disadvantaged homes and students with minority backgrounds are encouraged to apply.

University of Success provides academic, social, and cultural opportunities to enable students to complete high school successfully and gain entrance to a college or university. Students begin the program by attending a two-week residential Summer Academy focusing on science, math, critical thinking, and communication skills. Students attend daily classes, live in dorms, eat in campus dining halls, and participate in nightly academic, social, and recreational activities.

Additional services such as tutoring, mentoring, Saturday programs, PSAT/SAT preparation, and college/career planning are offered to students from the time they begin the program until they graduate from high school. Students must attend the Summer Academy to be eligible for all follow-up services.

For more information, students should contact their school counselor or The Dexter Hanley College, at (570) 941-7580.

### Time Travelers

A three-week summer program co-sponsored by The University of Scranton and NEIU #19 for high achieving sixth-, seventh-, and eighth-grade students, Time Travelers are immersed in subject matter from a time period and learn thematic lessons that include science, math, literature, art, history, and drama from that era.

The residential program allows students to experience many aspects of college life as they attend daily classes, live in dorms, eat in campus dining halls, and participate in nightly academic, social, and recreational activities. Residential students arrive each week on Sunday at 6:00 p.m. and depart each Friday at 5:00 p.m. A commuter option allows students to participate in the 9 a.m. - 5 p.m. daily schedule. Limited scholarships are available.

Students with a B+ or better grade-point average are eligible for the program. Students with grade-point averages below a B+ may be admitted if they obtain a letter of recommendation from a school official. All students must include a current grade report with the program application. Participation is limited and students are selected on a first come, first served basis. For more information, contact The Dexter Hanley College, at (570) 941-7580.

### Arts Alive

Arts Alive is an intensive four-week program for K-12 teachers and students in grades 9, 10, and 11 who are talented in the arts. Professional artists teach courses in painting, photography, three-dimensional art, theatre, dance, music, poetry, and television and radio communications. Participants benefit from an initial hands-on workshop on the IDEPPI model sponsored by the University of the Arts, Philadelphia. Teachers can obtain six graduate credits from the University of the Arts or six Pennsylvania in-service graduate credits.

Arts Alive is sponsored by The University of Scranton; NEIU #19; Keystone College; local school districts; the Pennsylvania Council of the Arts; the University of the Arts, Philadelphia; and Fleet Bank.

Residential or commuter options are available. Many school districts offer scholarships for artistically talented students. For additional information, students should contact their high school counselor or The Dexter Hanley College, at (570) 941-7580.

## FINANCIAL AID FOR DEXTER HANLEY COLLEGE STUDENTS

At the present time Hanley College students are eligible to apply for several forms of federal and state financial aid. Eligibility for all grants, loans, and institutional aid requires the student to submit the University Application for Scholarship and Financial Aid and the Free Application for Federal Student Aid (FAFSA). The student must also submit signed copies of the tax information for the student and spouse/parent (if required). Priority deadline for incoming students is May 1st. Returning students must file by April 15th.

In addition to the federal and state financial-aid programs, Hanley students are eligible to apply for the following institutional-aid programs.

**Pennsylvania Higher Education Assistance Agency**

Dexter Hanley College students are eligible to apply for PHEAA grants if they are taking six credits a semester.

**Pell Grants**

Dexter Hanley College students taking at least three credits a semester are eligible to apply for federal grants administered under the Pell Grant program.

**Dexter Hanley Full-time and Part-time Grants**

Full-time and part-time grants are awarded to Hanley College students who demonstrate need, academic progress, and enrollment status of at least six credits. Awards range from $500 to $3,500/yr.

**The Eugene J. Donahue Scholarship Award Fund**

See page 38.

**Rev. John J. Fitzpatrick, S.J., Scholarship**

See page 39.

**Dexter Hanley College Student-Government Scholarship**

This limited-tuition scholarship is available only to DHC students with demonstrated financial need, who have completed 45 credits with a 3.00 or higher grade-point average, and are not eligible for any other financial assistance.

**Robert L. McDevitt Scholarship**

See page 43.

**Newcombe Scholarship for Mature Women**

The Charlotte W. Newcombe Foundation provides limited-tuition scholarships for mature women students completing their education in preparation for a second career. These scholarships, available to women 25 years of age or older who have completed at least 60 credits, are available in any of the schools of the University of Scranton, but each year most are awarded to women enrolled in Dexter Hanley College.

**New Transfer-Student Scholarship**

Transfer students who have completed at least 30 credits at their previous institution and intend to pursue full-time studies at The Universityof Scranton are eligible to apply for this award. This is an academic as well as need-based scholarship. The award may be renewed until graduation upon maintenance of required grade-point average.

**Oppenheim Family Award**

See page 44.

**The Thomas P. White Award**

See page 46.

**Accounting Scholarship**

The Northeast Chapter of the Pennsylvania Society of Public Accountants has endowed a scholarship fund awarding one limited tuition scholarship each year to an Accounting major in Dexter Hanley College.

Consult pages 32-48 for more information on scholarships.

**Dexter Hanley College Deans' Scholarship and Loan Fund**

The Dexter Hanley College Deans' Scholarship and Loan Fund provides monies for scholarships and loans to allow adult and non-traditional students who experience unexpected financial difficulties to complete their education and fulfill personal and professional goals.

**Federal Stafford Loan**

Hanley College students are eligible to apply for Stafford Loans if they are taking at least six credits per semester.

# SAINT PIUS X SEMINARY

Faithful to the vision of the National Council of Catholic Bishops' document, *Program for Priestly Formation*, the Diocese of Scranton enjoys a cooperative arrangement with the University to enable seminarians to prepare for the intensive study of theology beyond the undergraduate level. Men who are seriously discerning the possibility of a vocation to the diocesan priesthood reside together in community at Saint Pius X Seminary in Dalton. Seminarians share in communal celebration of the liturgy, deepen their own prayer lives through indiviual spiritual direction, undertake practical apostolic service, and gain insight into the daily life of a priest. On campus, seminary students fulfill a Philosophy major (30 credits) in the University's College of Arts and Sciences and study a range of theological topics (18 credits) to provide a solid foundation for advancement to major seminary. In addition, seminarians pursue courses in history and languages, as well as electives that will futher enrich their undergraduate curriculum so that candidates for priesthood possess an intellectual formation truly reflective of the liberal arts tradition. While seminarians must enroll in general education courses required of all undergraduates, in addition to the seminary curriculum, they also possess the flexibility to develop a concentration, that is, a minor or double major, in another field of study that appeals to their personal interests. Seminarians are encouraged to avail themselves of the breadth of educational opportunities available to them at the University campus.

Students accepted into seminary formation who have already earned a bachelor's degree or who undertake college studies at a non-traditional age enter the Unversity's Dexter Hanley College, which aims to accommodate the particular needs of the non-traditional college student. Seminarians in this category who have not yet obtained a college degree follow the typical seminary curriculum toward a bachelor's in Philosophy. Those who possess a degree complete a two year pre-theology program focusing on the philosophy and theology prerequisites necessary to begin advanced theological study in major seminary.

Saint Pius X Seminary is operated by the Diocese of Scranton under the direction of the Most Reverend James C. Timlin, D.D., the Bishop of Scranton. The seminary formation faculty consists of priests of the Diocese; however, the seminary program serves students from beyond Northeastern Pennsylvania, including the Archdioceses of Baltimore and Washington, and the Dioceses of Allentown, Harrisburg, Scranton, and Wilmington.

For more information, contact Monsignor David Bohr, S.T.D., at (570) 563-1131.

## SPECIFIC COURSE REQUIREMENTS

Seminarians in the *four-year college program* normally major in Philosophy and are expected to take the following courses in fulfillment of the general requirements of the Philosophy Department and St. Pius X Seminary. Seminarians enrolled in the *two-year pre-theology program* are required to take the courses listed below that are marked by an asterisk (*):

### *PHILOSOPHY*

| | | | |
|---|---|---|---|
| PHIL 120 | Introduction to Philosophy* | PHIL 310 | Epistemology* |
| PHIL 210 | Ethics* | PHIL 311 | Metaphysics |
| PHIL 215 | Logic | PHIL 330 | Fate, Destiny, and Dignity |
| PHIL 220 | History of Ancient Philosophy* | | |
| PHIL 221 | History of Medieval Philosophy* | PHIL 434 | Issues in Philosophy and Theology* |
| PHIL 222 | Modern Philosophy* | | |

*THEOLOGY*

| | | | |
|---|---|---|---|
| T/RS 121-122 | Theology I-II* | T/RS 222 | Introduction to Liturgical Theology* |
| T/RS 184C | Inside the Catholic Tradition* | T/RS 210 | The Christian Religious Tradition |
| T/RS 230 | Moral Theology* | | |

*LANGUAGE*

| | |
|---|---|
| LAT 111-112 | Elementary Latin * |
| SPAN 101-102 | Elementary Spanish |
| GRK 111-112 | Elementary Greek (available) |

*INTERDISCIPLINARY*

| | |
|---|---|
| INTD 201-202C | Christian Classics (available) |

*GENERAL EDUCATON REQUIREMENTS*

| | | | |
|---|---|---|---|
| WRTG 107 | Composition | COMM 100 | Public Speaking |
| C/IL 102/103L | Computing and Information Literacy | | |

*Pre-theology program (2 years; 60 credits)

# The Graduate School

The Graduate School offers advanced study in a variety of professional fields as well as in the humanities and sciences. Its students are drawn from throughout Northeastern Pennsylvania, several surrounding states and from over 20 foreign countries. The students are pursuing master's degrees, various types of certification and personal enrichment.

# MASTER'S DEGREE PROGRAMS

The University offers master's degrees in the 20 different programs listed below. Programs for supervision, superintendent's letter of eligibility, and teacher's certification are also available.

Business Administration (MBA)
Human Resources Administration
Health Administration (MHA)
Rehabilitation Counseling
Community Counseling
School Counseling Clinical
Elementary Education
Secondary Education
Elementary-School Administration
Secondary-School Administration
Reading
History
English
Chemistry
Biochemistry
Chemistry
Software Engineering
Physical Therapy (MPT)
Theology
Nursing

# ADMISSIONS REQUIREMENTS

Applicants for admission should submit a completed application form, $35 application fee, three letters of reference and official copies of their transcripts. In addition to these requirements, which apply to all programs, individual programs may have special requirements such as test scores, personal interviews or writing samples. Consult the Graduate School catalog for these special requirements.

International students whose native language is not English must submit scores from the Test of English as a Foreign Language (TOEFL). Scores required on this test for admission vary by program. Consult the Graduate School catalog for minimum scores applicable to each program.

All application documents should be on hand in the Graduate School Office at least one month before the intended starting term. Consult the Graduate School catalog for more stringent deadlines for the Counseling, Health Administration and Nursing programs. International students should have their credentials in the Graduate School Office at least three months before the term in which they would like to begin their studies. Students may begin their studies in fall, spring, or summer. Software Engineering, Counseling, and Health Administration students may begin their studies only in the fall semester.

# COMBINED BACCALAUREATE/MASTER'S DEGREE PROGRAM

Undergraduate students often plan to pursue graduate study either in their undergraduate specialty or in another field of endeavor.

For the University's undergraduate student whose major field of study is in Accounting, Biochemistry, Chemistry, Computing Sciences, Health Administration/Human Resources, History, Human Services, or Nursing; who excels within his/her major field of study early in an undergraduate career; and who is positioned to and also desires to pursue advanced study in that field of endeavor, that student may have the opportunity to be admitted to a graduate program prior to obtaining a baccalaureate degree. This allows that student opportunity to pursue graduate course work in his/her major field while completing the other undergraduate requirements for graduation.

The undergraduate student who excels, in general, and desires to pursue graduate work in a field of endeavor other than his/her undergraduate major (often in a professional graduate program), may have the opportunity to be admitted to that graduate program prior to obtaining a baccalaureate degree in order to undertake graduate-course work at an appropriate time in his/her development (often prior to completing the requirements for the baccalaureate degree).

Departments housing undergraduate programs may allow some graduate-course work to satisfy undergraduate degree requirements (not to exceed 12 credit hours). In participating undergraduate programs, the student's undergraduate program advisor will recommend the undergraduate-course work for which graduate credits may be substituted.

The selection of the graduate-course work, the particular credits to be applied toward an undergraduate degree, and a prospectus of study require the approval of the student's undergraduate program advisor, the chair of the department housing the student's undergraduate-degree program, the graduate-program director in the student's academic discipline, the appropriate undergraduate-program dean, and the dean of the graduate school.

The Combined Baccalaureate/Master's Degree student will be expected to complete his/her baccalaureate degree no later than the semester in which he/she completes the master's degree. Often, the student entering the combined Baccalaureate/Master's Degree program will complete both programs during a five-year time period.

For further information concerning possible participation in the Combined Baccalaureate/Master's Degree Program please refer to the Graduate Catalog of the University of Scranton (or contact the Graduate School - (570) 941-7600). In addition, you may contact

| | |
|---|---|
| **Accounting:** Dr. Wayne Cunningham | (570) 941-4387 |
| or Dr. Michael O. Mensah | (570) 941-7569 |
| **Chemistry, Biochemistry:** Dr. Christopher Baumann | (570) 941-6389 |
| or Dr. David Marx | (570) 941-7511 |
| **Computing Sciences:** Dr. Yaodong Bi | (570) 941-6108 |
| or Prof. Richard Plishka | (570) 941-6111 |
| **Counseling & Health Services:** Dr. Oliver J. Morgan | (570) 941-6171 |
| or Dr. Ann Marie Toloczko | (570) 941-6172 |
| **Health Administration/Human Resources:** | |
| Dr. Peter C. Olden | (570) 941-4350 |
| **History:** Dr. Raymond Champagne | (570) 941-7428 |
| or Dr. Michael DeMichele | (570) 941-7443 |
| **Nursing:** Dr. Mary Jane Hanson | (570) 941-4060 |
| or Dr. Patricia Harrington | (570) 941-7673 |

## GRADUATE ASSISTANTSHIPS

Approximately 60 graduate assistantships are available each year. Students awarded assistantships receive stipends and are entitled to tuition scholarships.

Applicants for graduate assistantships must have an Application for Admission form on file in the Graduate School Office. Applications for graduate assistantships must be submitted by March 1. Awards are made on the basis of the student's academic record, experience and promise as a graduate student. International students are not eligible for graduate assistantships in their first semester.

Graduate students can also apply for Guaranteed Student Loans (GSL) and Federal Work-Study.

## SCHEDULING

Most classes are offered from 4:30 p.m. - 7:10 p.m., and 7:20 p.m. - 10:00 p.m., Monday through Thursday in the fall and spring terms. Almost all courses meet one night per week. Summer and intersession classes are also available.

## CORRESPONDENCE

For additional information, please write, call, FAX or visit our web site: http://academic.uofs.edu/department/gradsch/.

**Address:**

The Graduate School
University of Scranton
Scranton, Pennsylvania 18510 - 4631

**Phone:** (570) 941-7600 or 1 - 800-366-4723 (within the U.S.A.)/**Fax:** (570) 941-5995

**Email:** goonanj1@uofs.edu

# HONORS AND INTERDISCIPLINARY PROGRAMS

## SPECIAL JESUIT LIBERAL ARTS PROGRAM (SJLA)

*REV. RONALD McKINNEY, S.J. Director*

The University's SJLA Program, available by invitation to incoming freshmen, provides an alternate way of fulfilling a student's General Education requirements. Students not selected initially may apply for admission as second semester freshmen or as sophomores. Courses for SJLA program participants, who are drawn from all different majors, attempt to foster the following skills which University graduates have found particularly useful in law, medicine, business, and graduate school:

1. An understanding of key achievements in the literature, history, philosophy, theology and science of the Western classical and Christian heritage;
2. An ability to apply logical, systematic, and critical reflection to any given intellectual problem;
3. An understanding of and sensitivity toward the contemporary problems of our day;
4. An outstanding ability to communicate clearly and persuasively one's ideas through both the spoken and written word (what Jesuits have historically referred to as "eloquentia perfecta").

Students are expected to become involved in extracurricular and service activities on campus if they wish to remain in SJLA. Many participants also take advantage of the opportunities for foreign study, for earning a double major in philosophy, and for joining the Honors Program if invited during their sophomore year. Above all, participants are expected to seek out and interact with the professors and other students in this community of learning, which is under the direction of Rev. Ronald H. McKinney, S.J.

| *Dept. and Number* | *Fall Semester* | *Spring Semester* | | *Credits* |
|---|---|---|---|---|
| | FIRST YEAR | | | |
| MAJOR/COGNATE | Major/Cognate | Major/Cognate | 6-9 | 6-9 |
| Foreign Language | Modern or Classical | Modern or Classical | 3 | 3 |
| Phil 120J-210J | Intro. to Philosophy | Ethics | 3 | 3 |
| Elective-T/RS 121J | Theology I | Elective | 3 | 3 |
| FSEM - PHED | INTD 100 | Physical Education | 1 | 1 |
| | | | **16-19** | **16-19** |
| | SECOND YEAR | | | |
| MAJOR/COGNATE | Major/Cognate | Major/Cognate | 9-12 | 9-12 |
| T/RS 122J-Elective | Elective | Theology II | 3 | 3 |
| Phil 217J-311J | The Trivium | Metaphysics | 3 | 3 |
| PHED | Physical Education | Physical Education | 1 | 1 |
| | | | **16-19** | **16-19** |
| | THIRD YEAR | | | |
| MAJOR/COGNATE | Major/Cognate | Major/Cognate | 9 | 9 |
| Elective-INTD 110J | Elective | The Jesuit Magis | 3 | 3 |
| Hum 311J-312J | Masterworks I | Masterworks II | 3 | 3 |
| Elective-Phil 322J | Elective | Philosophy of Conscience | 3 | 3 |
| | | | **18** | **18** |
| | FOURTH YEAR | | | |
| MAJOR | Major | Major | 6 | 6 |
| Electives | Elective | Elective | 3 | 3 |
| Phil 413J-412J | The End of Philosophy | Art and Metaphysics | 3 | 3 |
| Elective-T/RS 314J | Elective | The Religions of the World | 3 | 3 |
| | | | **15** | **15** |

**Total: 130-142 credits,**
Depending on major

**PHIL 120J** Fr. McKinney
**Introduction to Philosophy** 3 credits
The aim of this course is to awaken in the student an appreciation of the nature and method of philosophical inquiry through an examination of key texts which grapple with the central questions that have arisen in the history of philosophy.

**PHIL 210J** Dr. Klonoski
**Ethics** 3 credits
Through the presentation of a select history of moral philosophy, students are introduced to the philosophical discipline of ethics. Original texts of such thinkers as Plato, Aristotle, Epicurus, Epictetus, St. Augustine, Hobbes, Kant, Mill, and Nietzsche are enlisted to explore the most fundamental question in ethics, "What is the good life?"

**PHIL 311J** Dr. Baillie
**Metaphysics** 3 credits
A textual inquiry into the adequacy of philosophical responses to the fundamental question, "What Is?" Special attention will be given to Aristotle, Hume, Kant, and Nietzsche.

**PHIL 217J** Dr. Whittaker
**The Trivium** 3 credits
Via numerous writing projects and speeches and the analysis of select philosophical texts, this practicum in grammar, logic, and rhetoric will encourage the student to connect the basic elements of reason, discourse, and persuasion.

**PHIL 322J** Dr. Black
**Philosophy of Conscience** 3 credits
Studies the role of conscience in moral judgement and considers its metaphorical, narrative, and ironic elements. Explores the difference between clarity and community, truth and wisdom, mind and person, principle and prudence as we study possible links between conscience, reason, eros, imagination, and education in some of the works of Plato, Kant, Marx, Vico, and St. Augustine.

**PHIL 412J** Dr. Casey
**Art and Metaphysics** 3 credits
A rigorous exploration of 1) the end of metaphysics as it plays itself out in modern science and technology, and 2) the significance of art as a way of overcoming the nihilism inherent in this end. Contemporary works of imaginative literature as well as of philosophy will be read as means to reflect critically on the postmodern condition of nihilism. Special attention will be given to the thought of Martin Heidegger and Hannah Arendt.

**PHIL 413J** Dr. Rowe
**The End of Philosophy** 3 credits
The purpose of this course is to draw together into a meaningful whole the materials studied in SJLA philosophy courses thus far. The course concerns the end of philosophy in two senses: First, the course will seek to evoke a sense of the purpose of philosophy not only within the academy, but in public life, in personal development, and even in the evolution of Western and world culture. Second, the course will raise the question of philosophy's alleged "completion," "exhaustion," or "destruction" as discussed by certain twentieth-century philosophers.

**T/RS 121J** Dr. Bader-Saye
**Theology I** 3 credits
This introduction focuses on Bible and Tradition, studying key books and themes of the Old and New Testaments, as well as major developments in early Christian thought.

**T/RS 122J** Sr. Foley, C.N.D.
**Theology II** 3 credits
This course focuses on the Christian Creed and Way of Life. The foundations of Christian doctrine and fundamental moral principles will be studied through the examination of major theological texts. Emphasis will be placed on a critical understanding of Tradition.

**T/RS 314J** Dr. Steele
**The Religions of the World** 3 credits
An exploration of belief in the traditions of the classical historical religions of the world through both systematic analysis and the reading of sacred texts.

**INTD 110J** Fr. McTeigue
**The Jesuit Magis** 3 credits
The purpose of this course is to teach students how to co-ordinate several themes into an integral whole: 1) Jesuit commitment to faith and justice, in terms of the Magis; 2) a multi-disciplinary approach to the investigation of certain key social and cultural problems on the international, national and local levels; 3) analysis and critique of socio-economic features of various cultures, guided by the values inherent in Jesuit education, with special attention paid to philosophical and theological resources; 4) service to others as a concrete response to social analysis, complemented by guided reflection upon the experience of service.

**HUM 311J-312J** Dr. Zola/Dr. Casey/ Fr. McKinney
**Masterworks I-II** 6 credits
In this team-taught, year-long seminar, students will read some of the great classics of world literature, learn how to facilitate their own discussions, write a comparative analytic paper, and be orally examined by a host of volunteer professors.

**Electives and Exemptions:** The five or six electives (beyond the two-semester language requirement) are intended to be used towards courses in math, computer literacy, and the natural and social sciences. There are always exemptions made to ensure that everyone takes at least 130 credits but no more than a credit-heavy major requires. Special exemptions may also be possible for those participating in foreign study, in Honors, or in a difficult double major or minor.

*SJLA students are eligible to apply for the Christopher Jason Perfilio Memorial Scholarships awarded each year since 1995.*

## HONORS PROGRAM

*DR. ELLEN CASEY, Director*

The Honors Program at The University of Scranton concentrates on directed independent work for selected students who desire greater depth and breadth in their education. The Honors curriculum is designed to fit into existing University course requirements and to support students as they move into increasingly independent work. The sophomore courses, open only to Honors students, enable them to meet a University general-education requirement on a more advanced level.

Junior Honors students take tutorials both in and out of their majors. A tutorial is an exploration of a topic on an individually directed basis; the student meets with a faculty mentor weekly throughout the semester. Each Honors student must take three tutorials, at least one in the major and one out of the major or in the second major. The student may take a fourth and fifth tutorial. These tutorials count toward major, minor, cognate, or general education requirements.

In the Honors seminars a small group of Honors students meets weekly with the director and assistant director for student-led discussions. The junior seminar is based on an interdisciplinary reading list; the senior seminar is based on the senior Honors projects.

There is no tuition charge for these seminars, since they are the only Honors requirements which do not satisfy ordinary graduation requirements.

Senior Honors students do a year-long, six-credit project in their majors, working under the guidance of a professor to explore a specialized topic, either academic or professional in nature. Upon completion, the project is defended before a board of three faculty members who judge whether it is of Honors caliber.

There is no extra charge for Honors work. In addition, Honors students who entered the University before fall 1996 and therefore pay tuition per credit can receive scholarships in their final semester for up to two courses, provided these courses are over and above graduation requirements. Honors students who entered the University beginning in fall 1996 and therefore pay flat tuition may take between 12 and 21 credits in their third and fourth years at the flat rate.

## ADMISSION TO THE HONORS PROGRAM

Applications are accepted every fall from those students who have at least eighteen hours of college credit and who expect to graduate after three more years of work at the University. Applicants must ordinarily have at least a 3.3 GPA; a minimum of a 3.5 GPA (cum laude) is required for graduation in the Program. The number of spaces in the program is limited, and admission is based on the applicant's high school and college records, SAT scores, application, recommendations, and interviews. For further information contact Dr. Ellen Casey, Director of the Honors Program.

SCHEDULE

| | Fall | Spring |
|---|---|---|
| Sophomore Year: | Application | HUM 286H or NSCI 286H |
| Junior Year: | 1 or 2 tutorials | 1 or 2 tutorials<br>HONR 387H: Junior Honors Seminar |
| Senior Year: | Honors Project<br>HONR 489H: Senior Honors Seminar | Honors Project<br>Defense of Project |

**HUM 286H** Dr. Ellen Casey
**(C,W)Victorian Studies** 3 credits
This course uses literature to explore 19th-century British social and intellectual history. Focusing on the period from 1832-1901, it examines Victorian attitudes toward industrialization, religion, art and gender.

**NSCI 286H** Dr. Christopher Baumann
**(E)Elements of Natural Science** 3 credits
This course presents an overview of the methods of the natural sciences. The applications of these methods in the solution of historical and modern problems will be discussed. Possible topics include: atmospheric and oceanic chemistry, relativity, quantum theory, and chaos.

**Honr 387H** Drs. Casey and Baumann
**Junior Honors Seminar** 3 credits
Student-led discussions of contemporary non-fictional works chosen for their variety and their importance. The seminar does not satisfy any general education requirements.

**Honr 489H** Drs. Casey and Baumann
**Senior Honors Seminar** 1 credit
Student-led discussions of the content, rationale, and methodology of Senior Honors Projects. This seminar does not satisfy any general eduation requirements.

**Dept 385H-389H** Staff
**Honors Tutorial** 3 credits
An exploration of a topic on an individually directed basis.

**Dept 487H-489H** Staff
**Honors Project** 3 credits
An independent project of academic or professional nature culminating in an oral defense before a board of three faculty members.

No Honors Program coursework may be taken on a Pass-Fail Basis.

# THE BUSINESS LEADERSHIP PROGRAM

*DR. ROBERT L. McKEAGE, Director*

Leadership, the process of persuasion or example by which the members of a group are persuaded to pursue the group's objectives, is the focus of many new programs in education. The Business Leadership Program in the University's Kania School of Management provides selected students with an opportunity to perfect their talents for business leadership. The program includes special sections of key business courses taught from the leadership perspective, leadership seminars, a mentor/internship program, and an independent leadership project.

The key courses are taught with a special emphasis on business leadership by faculty chosen for their exceptional teaching and their interest in the leadership concept. The leadership seminars will help the students assess and perfect their talents for leadership and will put them into contact with many business leaders. Noteworthy among the opportunities are the internships (where the students are placed with business leaders who serve as mentors) and the projects developed and executed by the students to demonstrate their leadership skills. The program will culminate in the students' preparing portfolios on the essence of leadership, as derived from participation in the program, and defending their concepts of leadership before a faculty board.

This highly selective program accepts 15 sophomores each spring to begin the two-year curriculum the following fall. Applicants will be selected on the basis of the following criteria:

Leadership experience and/or potential; drawing from the student's record in high school, college, work history, clubs and activities.

Student's self-assessment and motivation in applying—how and why this program relates to the student's long-term goals.

Interests and hobbies.

Recommendations of teachers, others.

3.3 grade-point average (ordinarily); a minimum of a 3.5 grade-point average will be needed for graduation with honors in the program

*SCHEDULE*

| | Fall | | Spring | |
|---|---|---|---|---|
| Junior Year: | BLDR 351 | Prin. of Management I | BLDR 355 | Business Ethics |
| | BLDR 385 | Business Leadership Seminar #1 | BLDR 386 | Business Leadership Seminar# 2 |
| Senior Year | BLDR 455 | Policy & Planning | BLDR 484 | Eloquentia Negotialis |
| | BLDR 485 | Business Leadership Seminar #3 | BLDR 486 | Business Leadership Seminar# 4 Senior Project |

Although three of the four following courses are required of all business students, sections designated by (BLDR) are restricted to students in the Business Leadership Program.

**BLDR 351**
**Principles of Management** 3 credits
This course covers the key aspects of the management process for decision-making. The focus is the organizational setting in which business leadership is exercised.

**BLDR 355**
**Business Ethics** 3 credits
The individual and social ethics of the major areas of decision-making in business from a leadership perspective.

**BLDR 455**
**Policy and Planning** 3 credits
This is the capstone course for all business majors. Concepts and skills developed in the functional areas of accounting, finance, management, marketing and production/operations are integrated and applied to the top-level management of an organization. Topics include analyzing organizational environment, setting missions and objectives, developing strategies and plans. allocating resources, and designing organizational structures, reward, and control systems. Special emphasis will be given to the role of executive leadership and values in the articulation of a corporate vision and culture, and in the choice of growth and competitive strategies. Intended as a case- and project-oriented course.

**BLDR 484**
**(W)Eloquentia Negotialis** 3 credits
This final course examines modes of public discourse about economics, politics, and business. Taking "The Economist" as its text, the class will analyze the news, editorial, and advertisement content of this weekly magazine. Drawing from their diverse backgrounds in Business course work and from their common background in BLDR courses, students will examine the rhetoric of individual pieces. Students will articulate the results of this rhetorical and ethical analysis through both written reports and oral presentations to the class.

The following are one-credit seminars.

**BLDR 385** **Self Assessment**
**Business Leadership Seminar #1** 1 credit
Focus is on identifying the characteristics of leadership, self-assessment of personal strengths and weaknesses, and preparation of plan for self-development.

**BLDR 386** **Empowerment**
**Business Leadership Seminar #2** 1 credit
Focus is on identifying the tasks of the leader and "enabling or empowering" people to achieve the organization's goals

**BLDR 485** **Mentorship**
**Business Leadership Seminar #3** 1 credit
Student is placed in an organizational setting as a leadership intern to study the leadership of the organization.

**BLDR 486** **Senior Project**
**Business Leadership Seminar #4** 1 credit
Student proposes, develops and executes a project evidencing a high degree of leadership skills and activity.

# OTHER INTERDISCIPLINARY PROGRAMS

## CATHOLIC STUDIES PROGRAM

*DR. STEVEN T. DOUGHERTY, Director*

The Catholic Studies Program seeks to provide every student with the opportunity to engage the Catholic tradition in a deeper and broader way than the typical course of studies can provide. Accordingly, this program casts a wide net over what the Catholic tradition and heritage are and how they interface with human endeavor. Catholic Studies is a specialization built around a multi-disciplinary core that provides a systematic way of integrating the many facets of Catholic tradition with various academic disciplines. Because Catholic tradition is integrally linked to virtually every subject, it can provide a natural integrative coherence for nearly all majors and areas of studies. Thus the CSP provides a good means of organizing many general-education requirements into a unified concentration; it is an attractive academic program for rounding out a student's Catholic higher education.

The Catholic Studies Program consists of both inter- and uni-disciplinary courses which provide the opportunity to study the Catholic heritage in the ancient and the contemporary Church alike, and give access to the rich forms in which it has been expressed in literature, art, architecture, music, history, philosophy, science, etc. Catholic Studies welcomes all interested students whether or not they are Catholic. It is compatible with all majors. Ideally, students will enter in their freshman year, but it is possible for students to enter in their sophomore year. Courses in the program will meet either general-education, major, minor or cognate requirements. All non-CSP students are welcome in any course(s) in the program, but CSP students are given enrollment preference. Honors tutorials are encouraged. SJLA students are welcome.

All courses taught in the Catholic Studies Program will seek to promote appreciation of the Catholic tradition by being faithful to the Church's apostolic teaching. Courses will also encourage students 1. To integrate faith and academics; 2. To study the Catholic Tradition in an intellectually rigorous way; 3. To assess human intellectual activity and experience in the light of the Catholic faith; and 4. To examine the experience of Catholics in history, politics, various social groups, philosophical and religious movements, and/or science and technology.

The concentration consists of 21 credits: six are required; the other 15 are electives. T/RS 184C must be taken; one semester of Christian Classics is also required. Students may build their studies on their majors and interests. Students are invited to petition for readers that meet program standards. Students may likewise seek permission for courses not cross-listed to count for credit, provided they are eligible to do significant Catholic Studies work in them.

CATHOLIC STUDIES ELECTIVES: **Students will choose five courses from a list that may be obtained from the Director, and which is also available from the Registrar's office.**

**Required courses**

**T/RS 184C** Dr. S. Mathews
**(P,W)Inside the Catholic Tradition** 3 credits This introduction to Catholic Tradition will study its scope, depth, and on-going development, reception, and characteristics. Topics covered include Faith and Revelation, the intercommunion of Scripture and Tradition, the role of Magisterium, and the development of doctrine. Selected readings are taken from important conciliar texts and theologians.

**INTD 201C-202C** Staff
**(P,W)Christian Classics I-II** 6 credits Each semester of this CSP core course provides a structured opportunity for reading in common some of the major Christian works of literature and spirituality with which every educated Catholic should be familiar. Important Catholic books and significant works of some great men and women who have shaped Christian thought and life will be read and discussed.

## ENVIRONMENTAL STUDIES CONCENTRATION

*DR. LEONARD W. CHAMPNEY, Political Science Department*
*PROFESSOR JOHN R. KALAFUT, Physics and Electrical Engineering Department*
*DR. EDWARD M. SCAHILL, Economics/Finance Department*
Program Co-Directors

The Environmental Studies Concentration introduces students to the scientific, economic, legal, political and philosophical dimensions of environmental issues, both within the United States and globally. The concentration is open to students from any major and may be of particular interest to students planning careers in government, law or business.

Courses for the Environmental Studies Concentration are drawn from eight departments in The College of Arts and Sciences and The Kania School of Management. Many of these courses may also be used for general education requirements. To enroll, students should consult one of the co-directors of the concentration. The concentration consists of eight courses:

| | |
|---|---|
| PHYS 106 | (E) Energy and the Environment (general education, natural science) |
| NSCI 201 | (E) Science and the Human Environment (general education, natural science) |
| CHEM 202 | (E) Global Change (general education, natural science) |
| ECO 300 | Economics of Environmental Issues |
| PS 230(S) | Environmental Policy (general education, social behavorial science) |
| MGT 210 | Business and the Environment |
| TRS 316 | God and Earth |
| PHIL 213 | (P) Environmental Ethics |

In addition, MATH 201, Algebra and Environmental Issues, is recommended. This course fulfills the quantative reasoning requirement in the general education curriculum, and is also a writing intensive course.

Natural Science majors who wish to pursue the Environmental Studies Concentration may complete the three natural science courses using any combination of the natural science courses listed above and/or the following courses:

| | |
|---|---|
| CHEM 340 | Environmental Chemistry |
| CHEM 342 | Environmental Toxicology |
| CHEM 344 | Environmental Geochemistry |
| BIOL 273 | Marine Biology |
| BIOL 371 | Ecology |
| BIOL 471 | Applied Ecology |
| BIOL 473 | Estuarine Ecology |

## HUMAN DEVELOPMENT

*DR. JAMES P. BUCHANAN, Director*

This program offers all students, especially those majoring in the behavioral and social sciences, the opportunity to develop a multidisciplinary focus in human development. The academic aims of the concentration are to provide an understanding of: 1. Both normal and exceptional development of humans as biological and psychological organisms; 2. The relationship between individuals and family/social environment; and 3. The means to enhance human development, including a field experience in a human-development agency.

The 30-credit Human Development concentration is administered by an interdisciplinary board of full-time faculty from the Psychology, Sociology, and Human Resources departments. Students interested in careers and graduate programs in human development should contact the concentration director for more information on course choice and on integrating the concentration with various majors. Students who complete this concentration will have the achievement noted on their transcripts.

The Human Development concentration requires the following:

1. Childhood & Adolescence (PSYC 221)
2. Adulthood & Aging (PSYC 222) or Introduction to Gerontology (GERO 110)
3. Abnormal Psychology (PSYC 225)
4. Case Management and Interviewing (HS 241)
5. Clinical Psychology (PSYC 360) or Counseling Theories (HS 242) or Introduction to Social Work (SOC 115)
6. Anatomy and Physiology (BIO 201) or ABC's of Genetics (BIO 202) or Behavioral Neuroscience (PSYC 231)
7. Three of the following courses with at least one course from the cultural-diversity group of: Cultural Anthropology (SOC 234), American Minority Groups (SOC 224), Marriage and the Family (SOC 210), Exceptional Child (HD 335), Family Development (HD 224), Multiculturalism in Human Services (HS 333), Psychology of Women (PSYC 237), or Juvenile Delinquency (S/CJ 214), and at least one course from the applied skills group of: Educational Psychology (EDUC 222), Early Childhood Education (EDUC 140), Child Welfare (SOC 118), Group Dynamics (HS 341), Psychiatric Rehabilitation (HS 323), Marital and Family Therapy (HD 234), Marital and Family Counseling (HS 334), or Behavior Modification (PSYC 284).
8. Field Experience in Clinical Psychology (PSYC 480) or Internship in Human Services (HS 380) or Internship in Social Work (SOC 480)

**HD 224** Dr. Buchanan
**Family Development** 3 credits
(Prerequisite: PSYCH 110) This course will explore the reciprocal interactions among children and parents as related to the development of all individuals in the family. Topics to be covered include the roles of family members, parenthood and marriage, parenting at specific developmental stages, families with single parents, families with exceptional children, and child abuse.

**HD 234** Dr. Norcross
**Marital and Family Therapy** 3 credits
(Prerequisite: Psych 110; recommended: Psych 225) An introduction to the theory, research, and practice of couples-counseling and family therapy. Topics include family dysfunctions, assessment methods, treatment approaches, innovative techniques, and research findings. (Also listed as HS 234.)

**HD 335** Staff
**Exceptional Child** 3 credits
(Prerequisites: Psych 110 and Psych 225) This course will consider atypical social, emotional, and mental development during childhood and adolescence. Topics include mental retardation, intellectual giftedness, learning disabilities, psychopathology of childhood and adolescence, and conduct disorders

## ITALIAN STUDIES CONCENTRATION

*DR. VIRGINIA A. PICCHIETTI, Director; DR. JOSEPHINE M. DUNN, Co-Director*

The Italian Studies Concentration is designed to advance students' understanding of diverse aspects of Italian culture and society. The concentration is open to all majors and consists of both interdisciplinary and single-discipline courses drawn from various academic departments at the University. It encourages both breadth and depth in the study of Italian culture and society; its goal is to cultivate a broadly-based knowledge of Italian civilization and its contributions to the specific fields comprising the concentration. At the same time, courses in the concentration will fulfill general-education requirements with an emphasis on cultural diversity and on a writing-intensive curriculum.

The curriculum is designed to accomplish the following: provide a focused study of Italian culture and society; develop oral and written skills; and develop practical skills applicable to trips to Italy and in career fields. The concentration requires the successful completion of seven courses, three of which are required courses and four of which are to be chosen from an approved list of electives. Students will be required to complete successfully two courses of Italian language as well as the Italian Studies Seminar. Students will enter the language level they can master (determined in consultation with the director and/or the language department), and will fulfill the language requirement by successfully completing two of the approved language courses.

The following are required and elective courses that make up the Concentration:

**Italian studies required courses:** ***Students will choose two language courses (at appropriate level) and seminar.***

| | |
|---|---|
| ITAL 101-102 | Elementary Italian |
| ITAL 211-212 | Intermediate Italian |
| ITAL 311-312 | Advanced Italian Composition and Conversation |
| | Italian Studies Seminar (a specific topics course whose content varies according to the interests of students and faculty. Offered every two years.) |

**Italian studies Elective courses:** ***Students will choose four.***

| | | | |
|---|---|---|---|
| ENGL 431 | Dante's Divine Comedy | | Origins to Present |
| ITAL 207 | Italian Women Writers | ARTH 214 | Renaissance Art and |
| ITAL 208 | Envisioning Italy from Novel to Film: The Case of Neorealism | | Architecture: 1250-1500 |
| | | ARTH 216 | Michelangelo and |
| ITAL 209 | Italian Cinema: From | | His World |

| | | | |
|---|---|---|---|
| ARTH 217 | Leonardo (Da Vinci) | HIST 240 | Modern Italy |
| ARTH 218 | The Age of Rembrandt | HIST 323 | The Renaissance |
| ARTH 384 | Special Topics in Art History (if applicable) | PHIL 221 | Medieval Philosophy |
| | | PHIL 222 | Modern Philosophy I |
| | | NSCI 103 | The Ascent of Man |
| MUS 217 | Opera | | |
| MUS 284 | Special Topics in Music History (if applicable) | | |

## LATIN AMERICAN STUDIES CONCENTRATION

*DR. LINDA MEDFORD-MILLEU, Director*

The Latin-American Studies Concentration is designed to advance students' awareness and understanding of Latin America. It seeks to provide both broad, general knowledge of the entire Latin American region, and in-depth knowledge of specific countries, regional groupings of countries, and cultures both dominant and marginal. The concentration is open to all majors and it consists of six additional credits in courses from a variety of disciplines with a primary focus on Latin America. These courses fulfill general education requirements in the Humanities area (Foreign Languages and History), the Social Sciences area (Political Science), and some of them also carry cultural diversity and writing intensive credit. Supporting courses may fulfill general education requirements in other areas as well.

The Latin American Studies Concentration is an attractive complement to many existing majors. Related fields include foreign languages, international business, international language/business, international studies, history, political science, theology, philosophy and sociology. Some related professions or careers include law, government, non-governmental organizations, non-profit organizations, banking and teaching.

Core and supporting courses are listed below. Others will be added as they are developed.

Language (4.5–6 credits)
SPAN 311-312* or PORT 210**

Politics (6 credits)
PS 3XX Latin American Politics (regional)
PS 3XX Topical or country-specific courses

History (6 credits)
Latin American History Hist 125-126

Supporting Courses (6 credits)
SPAN 320 Introduction to Literature
SPAN 314 Topics in L.A. Culture & Civ.
SPAN 331 Spanish American Literature
SPAN/PS 295 Contemporary Mexican Culture and Language
T/RS XXX Liberation Theologies
PHIL XXX Latin American Thought

*At this level or higher; intermediate Spanish (211-212) is a prerequisite for 311
**Elementary Portuguese is taught intensively, only 4.5 credits are required.

# PEACE AND JUSTICE STUDIES PROGRAM

*PROF. STEPHEN CASEY, Coordinator*

The Synod of Bishops of the Roman Catholic Church (1971) reported that "actions on behalf of justice and participation in the transformation of the world fully appear to us as a constitutive dimension of the preaching of the Gospel...". The 32nd General Congregation of the Society of Jesus (1974-5) established a pedagogical norm for its own institutions of higher education when it determined that the practice of faith was inextricably linked to the promotion of justice. In this vein the University's Peace & Justice Program was instituted to bring academic studies, including classes, community service and interdisciplinary research, into the process of building a more just and thus more peaceful society.

The Peace and Justice Concentration will be an attractive complement to the academic programs of students planning careers in law, international relations, human services, ministry and teaching - to name only the most obvious. However, any students who have a personal interest in the problems of peace and justice, regardless of their career goals, can benefit from its multi-disciplinary concentration of courses. It is open to majors from all the undergraduate schools of the University. Eight courses (24 credits) must be taken by students in order to have "Peace and Justice Concentration" added to their transcript. Courses may be taken as part of the cognate requirement (with permission of the chairperson of the major) or as part of the general-education requirements.

The following courses will provide students with the opportunities to reflect critically on the social, economic, psychological, political and structural issues impeding the establishing of a just & peaceful society:

A. Requirements in Theology (any two of the following):

Church and Contemporary Social Issues (T/RS 326)
Faith and Justice (T/RS 236)
God and the Earth (T/RS 316)
Jesus and the Moral Life (T/RS 338)
John Paul II and Catholic Social Thought (T/RS 232)
Politics: A Christian Perspective (T/RS 237)
Prophets & Profits (T/RS 236)
Social Ethics (T/RS 231)
Twentieth-Century Peacemakers (T/RS 234)
Wealth and Poverty in the Biblical Tradition (T/RS 328)

B. Electives (any five courses listed below can be counted; others may be included with approval from the program coordinator):

*College of Arts & Sciences:*

Responsibility in Communication (COMM 220)
Political Communication (COMM 311)
Cultural Geography (GEOG 217)
The Third World (HIST 211)
Race in American History (HIST 216)
Ethnic and Racial Minorities in N. E. PA (HIST 224)
Energy and the Environment (PHYS 106)
Environmental Ethics (PHIL 213)
Feminism: Theory & Practice (PHIL 218)
Literature of American Minorities (LIT 207)
Political Philosophy (PHIL 227)
Philosophy of Culture (PHIL 410)
Geopolitics (PS 211)
Women, Authority and Power (PS 227)
Social Psychology (PSYCH 220)
Law and Society (S/CJ 210)

Community Organization (SOC 116)
American Minority Groups (SOC 224)

*Interdisciplinary Courses:*

Organizational Social Responsibility (MGT 473)
Urban and Regional Economics (ECO 462)
Development Economics (ECO 465)

*College of Professional Studies:*

Multiculturalism in Human Services (HS 333)

C. Integrative Capstone Course: (required in Jr./Sr. year)

Toward a Just and Peaceful World (T/JP 310) 3 credits

This course will reflect on the various issues and problems raised by peace and justice study. It will consider the relationship of religion, moral philosophy and the social/political concerns embraced in the quest for a human world order. Faculty from several disciplines will make presentations. Each student will write a paper from the perspective of his/her major area of concentration.

## WOMEN'S STUDIES CONCENTRATION

*DR. JEAN HARRIS, Director*

The Women's Studies Concentration consists of both interdisciplinary and single-discipline courses which examine women's experiences and the ways gender-related issues affect human lives and cultures. Faculty and students analyze the ways gender roles and images, and assumptions about gender, are reflected in art, business, literature, law, philosophy, public policy, religion, language, history, the sciences, and their own lives. At the same time many Women's Studies courses will address issues of race, class, ethnicity, and age which intersect with gender-related issues.

Women's Studies courses focus on women's experiences in history, society, and culture, and examine their reactions to such experiences; examine institutional structure/modes of authority/analysis of power, especially considering their implications for women; and incorporate one or more feminist analyses/scholarly works (recognizing that there are multiple, and even conflicting, feminist perspectives).

Women's Studies seek to promote critical thinking, intellectual growth, and a self-awareness useful to all students. It is an attractive academic supplement to the programs of students planning careers in government, law, business, human services, ministry, and teaching—to name but a few.

Courses for the Women's Studies Concentration are drawn from all the colleges at the university and are open to students in all majors. (To enroll, students must see the Director of Women's Studies.) The concentration consists of six courses including one required core course. The student may take PHIL 218 or SOC 215 as the required core course. The remaining five courses are chosen across several departments by the student from cross-listed courses approved by the Women's Studies Committee. Many of the cross-listed Women's Studies courses also fulfill major, minor, cognate, and/or general-education requirements.

Students may seek permission from the Women's Studies Committee to take no more than one reader for Women's Studies credit, subject to the usual rules governing readers. Students may also petition to substitute no more than one course not cross-listed with Women's Studies, if the course has sufficient Women's Studies content and the student is able to do a signficant project/assignment on a Women's Studies topic.

**WOMEN'S STUDIES COURSES**

| | |
|---|---|
| ARTH 210 | Women in the Visual Arts (C,D) |
| COMM 229 | Gender and Communications (D) |
| ENLT 225 | Writing Women (C,D,W) |
| ENLT 227 | Frankenstein's Forebears |
| ENLT 235 | Novels by Women (C,D) |
| ENLT 317 | Race in Anglo-American Culture 1600-1860 |
| *FREN 430 | French Women Writers |
| HIST 238 | History of American Women I (D) |
| HIST 239 | History of American Women II (D) |
| ITAL 207 | Italian Women's Writing in Translation (C,D,W) |
| HS 337 | Counseling Girls and Women |
| LIT 207 | Literature of American Minorities (C,D,W) |
| MGT 472 | Women in Management |
| NURS 111 | Women's Health (D) |
| PHIL 218 | Feminism: Theory and Practice (D) |
| PHIL 231 | Philsophy of Women |
| PHIL 236 | Advanced Topics in Feminist Theory (D) |
| PS 216 | Women's Rights and Status (D) |
| PS 227 | Women, Authority and Power (D) |
| *SPAN 430 | Hispanic Women Writers |
| SOC 215 | Feminisim and Social Change |
| SOC 284 | ST: Family Issues and Social Policies |
| T/RS 315 | Women in Christianity (D) |
| T/RS 319 | Women's Spiritual/ Autobiographical Writings D) |
| THTR 372 | Contemporary Women Playwrights |
| WOMN 380-81 | Women's Studies Internship |
| WOMN 429 | Special Topics |

*Taught in the original language
Some of the listed courses have prerequisites; please consult departmental description

**WOMN 380-81**
Women's Studies Internship
(prerequisites PHIL 218, or SOC 215, or permission of Women's Studies Committee) Designed to broaden the educational experience of students by providing practical experience for them in various non-profit and other organizations that deal primarily with women's issues or women clients. Students will ordinarily be expected to write a reflection paper. Supervision by faculty members and agency supervisor.

# INTERNSHIP PROGRAMS

The University's commitment to internships as an integral part of the educational process is strong and growing. In 1998-99, almost 250 students in The College of Arts and Sciences were engaged in internships carrying academic credit related to their majors or vocational goals. 165 of these were seniors—one third of the class—in twelve different majors.

The University of Scranton offers two kinds of internship experiences—internship experiences for credit and internship experiences that are not for credit. Internships for credit integrate content knowledge and theory with work, are usually taken in the junior or senior year, and require substantial academic work. Internships that are not for credit provide the student an opportunity to learn about and experience the world of work, but they are less structured and do not necessarily relate to specific course work and do not require any academic work. For specific information on internship opportunities, the student should contact his or her academic advisor.

Majors in Medical Technology spend their senior year in one of six hospitals in Pennsylvania.

Students majoring in Physical Therapy select internships from some 275 regional and national health-care facilities and agencies formally affiliated with the University of Scranton program.

Majors in Human Service select educational, health, welfare, correctional, rehabilitation, day-care, and recreational agencies for their internship settings.

Majors in Health Administration serve a required internship in a variety of settings including hospitals, nursing homes, rehabilitation centers, and related health agencies and may serve a second internship. Those with a concentration in long-term care administration must serve two 520-hour internships in a long-term-care facility.

Seniors majoring in Accounting are eligible to participate in a 13-week internship with both national and regional public accounting firms. This internship usually takes place in December-March of senior year. Selection is made on the basis of GPA (minimum 2.67) and on interviews by company representatives. In recent years, students have worked for such firms as Coopers & Lybrand; Ernst & Young; KPMG Peat Marwick; Parente, Randolph, Orlando; Carey & Associates; and Prudential Asset Management Co., in New York, Philadelphia, and other cities. Students majoring in Finance, Management or Marketing are also eligible for internships, both in the Scranton region and in their home localities over the summer months.

Communication and English majors serve internships with academic credit in a number of newspaper and television positions as well as in public relations, campus journalism, theatre directing and related occupations.

Political Science and History majors serve pre-law internships in private law firms as well as in the public defender's office, district magistrate offices, district attorney's office in Scranton, Philadelphia, and a number of other cities.

Computing-sciences majors hold internships in a number of private companies in the Scranton area, in Binghamton, and in New York City.

Psychology majors in the clinical track complete a practicum during their junior or senior year at a variety of mental-health, substance-abuse, and social-service agencies under individual supervision. Other Psychology majors opting for the business minor may elect to complete an internship in personnel psychology and receive direct supervision in a variety of personnel offices in the area.

Sociology, Criminal Justice, and Gerontology majors spend part of the junior or senior year serving internships in criminal-justice agencies (corrections, probation and parole services, the district attorney's office, sheriff's and U.S. Marshals Services, private security and legal work) and social-work/human-service settings (child-care and juvenile programs, Cancer Society, and agencies serving older adults, etc.).

Environmental Science majors are required to take an internship or perform original research. Internships are generally taken after the junior year and can be undertaken in government agencies, non-profit groups, or industry.

Women's Studies offers internships for academic credit at the Campus Women's Center and at various local and national organizations that focus on women's issues.

Military Science students participate in internships at several overseas locations as well as across the continental United States. The internships are leadership-intensive and are based on the technical missions of many types of military units. Internships last from three to five weeks.

## FACULTY/STUDENT RESEARCH PROGRAM

The Faculty/Student Research Program (FSRP) gives students an opportunity to be involved in faculty research. Students in all fields (e.g. natural sciences, humanities, social sciences, business) can participate. They engage in a variety of activities ranging from relatively routine tasks to more sophisticated research.

There is no cost for the FSRP; the program is open to all students in good academic standing including incoming freshmen. While students do not receive academic credit, they do receive transcript recognition.

To participate in the program, students must identify a faculty sponsor with whom they want to work. This can be done either by talking to individual faculty members directly about their research interests or by consulting the FSRP Directory. The Directory includes information on research projects and any student prerequisites. When a student and faculty member agree to work together, they complete a learning contract that outlines the nature of the research, the tasks involved and the hours to be worked.

For further information about this program, contact the Office of Research Services, Room 221, The Estate, (570) 941-6190.

## STUDENT/FACULTY TEACHING MENTORSHIP PROGRAM

The Student/Faculty Teaching Mentorship Program(SFTMP) offers advanced students the opportunity to assist and be mentored by faculty in the teaching of selected courses. Together, they will craft the teaching/tutoring experiences that best fit the pedagogical requirements of the relevant course.

There is no fee assessed for this non-credit experience. While students do not receive academic credit or a grade, they do receive transcript recognition. The program is open to all undergraduate and graduate students in good academic standing.

For more information about SFTMP, please contact the Office of Instructional Development, AMH 119, (570) 941-6129.

## PRE-LAW PROGRAM

The University is justly proud of its tradition in providing students seeking careers in the law with a solid preparation for the demands of legal study and practice, based on an undergraduate curriculum rooted in liberal education. Graduates of the University in all regions of the nation have achieved distinction in virtually every area of the law, including such offices as local, state and federal judges. In Northeastern Pennsylvania, nearly half of the members of the legal community hold undergraduate degrees from The University of Scranton.

The clearest measure of the strength of the University's Pre-Law Program is the remarkable success its graduates have had in winning admittance to law schools throughout the country. Recent graduates have been admitted to many prestigious law schools, including Cornell, Georgetown, Harvard, and the University of Pennsylvania, American University, Boston College, Catholic University, Dickinson, Fordham, Notre Dame, Pittsburgh, Rutgers, Seton Hall, Temple, Villanova, and Widener.

**Pre-Law Curriculum.** No specific undergraduate major is required for admission to law school; the American Bar Association's statement on Preparation for Legal Education does not recommend any particular group of either majors or individual courses, noting that "the law is too multifaceted, and the human mind too adaptable, to permit such a linear approach to preparing for law school or the practice of law."

The ABA statement, however, does describe certain skills and values which are essential to success in law school and to competent practice. These are: **Analytic and Problem Solving Skills**, involving critical thinking and the ability to structure and evaluate arguments for and against propositions; **Critical Reading Abilities**, derived from substantial experience in the close reading and critical analysis of complex texts; **Writing Skills**, developed through rigorous practice in preparing and revising original pieces of substantial length; **Oral Communication and Listening Abilities**, based on experience in giving and evaluating formal presentations; **Research and Time Management Skills**, involving the ability to plan a research strategy, to undertake substantial library work, and to organize large amounts

of information within a fixed period of time; and, not least of all, a **Commitment to Serving Others and Promoting Justice**, based on significant experience in service projects while an undergraduate.

The skills noted above can be acquired by students majoring or minoring in any discipline that involves intensive reading and extensive writing such as, for example, English, history or political science. At the same time, students who have majored in other areas, including philosophy, languages, management, any of the social sciences, as well as the natural sciences, have enjoyed success in the study and practice of law. Ultimately, the best preparation for law school comes from taking challenging courses from demanding professors.

In addition to these skills and values, the ABA has identified several more specific areas of knowledge that pre-law students should acquire as undergraduates. The University's Curriculum 2000 provides a framework whereby all can be acquired through the General Education requirements applicable to all majors:

- a broad understanding of American history (HIST 110-111)
- a fundamental understanding of political thought and the American political system (PS 130-131)
- a basic understanding of ethical theory (PHIL 210)
- a grounding in economics, especially microeconomic theory (ECON 153)
- an understanding of basic pre-calculus mathematics (MATH 106 or equivalent)
- a basic understanding of human behavior and social interaction (PSYC 110 or SOC 110)
- an understanding of diverse cultures within and beyond the United States (the six-credit cultural-diversity GE requirement)

In addition to the courses listed above which satisfy general-education requirements, certain departments offer courses that can be of particular value to pre-law students and which, depending upon their major, can be taken as electives within either the major or cognate. Such courses include HIST 336 (History of American Law), HIST 337 (British Constitutional and Legal History), PS 311-312 (American Constitutional Law), and WRTG 212 (Writing for the Law).

**Pre-Law Internships.** Interested students with a grade-point average above 3.00 at the time of application may, with the approval of the appropriate dean, receive academic credit for internships served in the offices of either private law firms or various legal agencies such as the district attorney, public defender, or district magistrate. Prior approval of the planned internship is necessary. A minimum of 150 hours work is required for internship credit in PS 280. Application forms for these internships are available from the Registrar's Office.

**Pre-Law Advisory Council.** Continuing advice on course selection, career planning and the law school-application process is provided by a pre-law advisory council headed by Dr. Frank X.J. Homer as Director of Law School Placement. He is assisted by Ms. Constance E. McDonnell, Associate Director of Career Services, who aids law school applicants in assembling their credential files and coordinates the annual on-campus Law Fair; and Dr. Robert F. Hueston who serves as moderator of the student Pre-Law Society which provides a forum for speakers from the legal profession and sponsors trips to visit law schools, along with faculty members from the departments of Criminal Justice, English, History, Philosophy and Political Science in The College of Arts and Sciences as well as faculty representatives from both The Panuska College of Professional Studies and The Kania School of Management.

**Law-School Admission Test.** Along with a student's undergraduate academic record, the LSAT score is a critical factor in the law-school-admission process. Ordinarily, pre-law students take the LSAT at the end of the junior year or early in the senior year. As a means

of assisting University students to score up to their fullest potential on the LSAT, on-campus LSAT workshops are offered at least twice each year. These provide University students with an alternative to costly commercial test-preparation services.

## PRE-MEDICAL PROGRAM

The success of the University's Pre-Medical Program has been outstanding. Since 1980, the University has placed an average of over 50 students per year into American schools of medicine, dentistry, optometry, podiatry and veterinary medicine, often in the most prestigious schools in the country.

The University of Scranton offers its pre-medical students unique opportunities in anticipation of changes in health-care delivery for the twenty-first century. They include a special exposure to primary-care medicine (the practice of family physicians, general internists, and general pediatricians), predicted to be the area of greatest growth in medicine. Students have an opportunity to participate in an undergraduate primary-care internship through the Scranton-Temple Residency Program. In this program, students accompany physicians at Scranton Mercy and Moses Taylor Hospitals to gain exposure to clinical settings in primary-care medicine. Students gain transcript recognition for participation in this internship, as well as a clear view of the profession they seek to enter.

Moreover, The University of Scranton is one of only six undergraduate institutions participating in the Jefferson Medical College Physician Shortage Area Program (PSAP). This program is designed to recruit and educate medical students who intend to enter family medicine and practice in physician-shortage areas in Pennsylvania. Finally, University of Scranton students are encouraged to participate in programs at the Center for Primary Care at the Penn State College of Medicine, Hershey.

The Pre-Medical Program is supported by a network of hundreds of medical alumni and by an active Medical Alumni Council. The Medical Alumni Council has compiled a directory of physicians who have agreed to serve as resources for information or internship opportunities for University of Scranton students. It also sponsors on-campus programs to which undergraduate students are invited.

**Pre-Medical Undergraduate Curricula.** Many undergraduate students who intend to apply to health-professions schools choose Biology or Biochemistry as their major. However, students may choose any major, provided that they meet the requirements for entrance to medical, dental, or other health-professions schools.

For students at The University of Scranton, the *minimum* requirements are listed below. All courses must be taken with their corresponding labs.

Biology 141 and 142, General Biology
Chemistry 232 and 233, Organic Chemistry
Chemistry 112 and 113, General and Analytical Chemistry
Physics 120 and 121, General Physics

Many medical schools recommend that students demonstrate a wide range of interests in their choice both of courses and of extra-curricular activities. Volunteer work is strongly recommended by the admissions committees of most health-professions schools, as is course work in ethics, particularly in PHIL 212, Medical Ethics and/or T/RS 330, Biomedical Ethics.

Some medical and dental schools also have specific prerequisites for English, mathematics, or other courses, as listed in *Medical School Admission Requirements*, or *Admission Requirements of U.S. and Canadian Dental Schools*. Copies of these publications are available in the office of Dr. Mary Engel, Director of Medical School Placement.

The Association of American Medical Colleges recommends that undergraduate students planning to apply to medical school acquire a strong background in the natural sci-

ences, so students should consider courses in biology, chemistry, physics and mathematics beyond the minimum requirements. Students should develop strong oral and written communication skills, and they should complete rigorous courses in the humanities and social sciences. Honors courses and programs, independent study, and/or undergraduate research are also encouraged.

The University offers all applicants to health-professions schools the option of a formal applicant evaluation by the Health Professions Evaluation Committee (HPEC). This committee consists of sixteen faculty and administrators representing a wide range of academic disciplines. It is directed by Dr. Mary Engel, Associate Dean of the College of Arts and Sciences and Director of Medical School Placement, who also advises the health-professions organization.

Applicants are evaluated on academic record, volunteer and community service activities, extracurricular activities, and demonstrated motivation toward their chosen careers. Students submit documents and request faculty letters of evaluation and are interviewed by two members of HPEC. Through the HPEC interview, students have an opportunity to develop their interviewing skills and receive feedback on their application materials and interviewing performance. The HPEC evaluation package sent to health professions schools is a comprehensive narrative which describes in depth an applicant's qualifications for advanced study and a career in the health professions.

The University also makes available to students a wide variety of resources in the Health Professions Lending Library; information about materials which students may borrow is available from the Director of Medical School Placement.

## AEROSPACE STUDIES (Air Force Reserve Officer Training Corps)

*LT. COL. DONNA LYNN SMITH, Chairperson*

The Air Force Reserve Officer Training Corps (AFROTC) program at Wilkes University permits students attending The University of Scranton to earn commissions as officers in the United States Air Force while pursuing a University degree. Students may enroll in either the four-year or two-year programs. Aerospace Studies courses are held on the campuses of Wilkes University, Bloomsburg University, and King's College.

The four-year program permits students to enter the AFROTC program in freshman or sophomore year. (Students with three years remaining until graduation may enroll concurrently in the freshman and sophomore Aerospace Studies courses and can complete the four-year program in three years.)

The two-year program is available for students (including graduate students) who have at least two years remaining until graduation. Students interested in enrolling in the two-year program must apply as early as possible in their sophomore or junior year. Students should call 1-800-945-5378, ext. 4860, for more information.

**General Military Course** (Four-Year Program Only). The first two years of the four-year program constitute the General Military Course (GMC). GMC courses are open to any University student. Students enrolling in these courses do not incur any military service obligation. (Exception: Air Force scholarship recipients incur a commitment at the beginning of their sophomore year.) The GMC curriculum consists of four one-credit Aerospace Studies courses, plus a non-credit leadership laboratory each semester, which introduces students to U.S. Air Force history and environment, customs, courtesies, drill and ceremonies, and leadership skills.

**Professional Officer Course** (Two- and Four-Year Programs.) The final two years of the four-year program comprise the Professional Officer Course (POC). It consists of four three-credit Aerospace Studies courses, plus a non-credit leadership laboratory each semester.

POC cadets earn a $150-per-month, tax-free subsistence allowance during the academic year and incur a military obligation. To be accepted into the POC, students must pass a physical examination and an officer-qualification test and must meet certain academic standards. Four-year cadets must also complete a four-week field-training program; two-year applicants must complete a five-week field training program, both of which are administered the summer before POC entry. In addition, all POC cadets must complete a course in mathematical reasoning prior to being commissioned.

**Uniforms.** All uniforms, equipment, and textbooks required for AFROTC are supplied by the U.S. Air Force. All cadets are required to pay a nominal initial deposit which will be refunded when the cadet returns all uniform items in satisfactory condition at the completion of (or withdrawal from) the AFROTC program.

**Scholarships.** The U.S. Air Force offers many 2-to-5-year full and partial scholarships for which qualified students may compete, if they enroll in AFROTC. All scholarship awards are based on individual merit, regardless of financial need, with most scholarship recipients determined by central selection boards. Scholarship-selection boards for students already in college are held each year. Since scholarship applicants must meet certain academic, physical-fitness and medical requirements to be considered by the scholarship boards, they should contact the Aerospace Studies department early to apply. All AFROTC scholarship recipients entering (or transferring to) The University of Scranton receive free room.

**Commissioning.** All students who satisfactorily complete the POC curriculum requirements are commissioned as second lieutenants in the U.S. Air Force, and will serve on active duty in a career specialty they have chosen, consistent with USAF needs.

For additional information, or if you have specific questions about the Air Force Reserve Officer Training Program, contact the Aerospace Studies Department, at 1-800-945-5378, extension 4860, or at www.wilkes\.wilkes.edu/~afrotc.

## SECOND DEGREES

Persons with good scholastic records and baccalaureate degrees from regionally accredited institutions, who wish to earn second baccalaureate degrees, must apply to Dexter Hanley College.

## SUMMER SCHOOL

The University of Scranton annually offers a Summer School of two sessions to allow students to accelerate their degree programs or to make up courses that may not have been completed during the regular semesters.

## SERVICE LEARNING

The Panuska College of Professional Studies, in keeping with the mission of this University, is committed to a program of service-learning, which provides a link between community service and academic study. Students learn and develop by participating in thoughtfully organized service that is conducted in and meets the needs of the community. Service-learning is integrated into and enhances students' academic curriculum by providing structured time for students to reflect on the service experience. The service experience is an effective strategy for achieving enrichment and introducing the student to the academic, social and civic needs of diverse groups of people. Through this program, students in The Panuska College of Professional Studies complete service-learning experiences as a requirement for graduation.

# Outside the Classroom

Much of a student's education takes place outside the classroom. At The University of Scranton, some of the formal academic learning process takes place off campus in the various internship programs; on campus there are available traditional extracurricular activities. In many instances, these activities merit and receive academic credit. They also provide further means for creating a community of scholars and a culture of excellence.

# STUDENT AFFAIRS

The University's Division of Student Affairs is committed to the integration of high-quality student learning with the development of the whole person. In addition, through resources, programs and collaborative efforts with the academic community as well as with all University divisions, it strives to form "men and women for others" in the Jesuit tradition, persons who are distinguished by a reflective and faith-filled vision for living that includes commitment to leadership and service in the world.

Efforts in the Student Affairs Division are designed to help students develop their "potential into achievement" in the following areas: intellectual life, wellness, diversity, citizen-leadership, life planning, culture and commitment to growth.

The Division is organized into six basic areas: student affairs administration, judicial affairs and assessment, multi-cultural affairs, student life (comprised of student life and leadership, including commuter and off-campus affairs, student programming, student government, leadership and orientation as well as residence life), athletics (intercollegiate and intramural and recreational) and student development (counseling, student health, wellness, campus women's center and career development and placement). Primary among these areas are multi-cultural affairs, student life, athletics and student development.

## MULTI-CULTURAL AFFAIRS

The University of Scranton is increasingly a learning community that mirrors the diversity of the Kingdom of God. Each individual in this community is encouraged to embrace the richness of life associated with other cultures and people of diverse backgrounds. Growth in this area centers on personal understanding and a comfort with one's own cultural identity and tolerance and support for those who are different. The assistant to the vice president for student affairs for multi-cultural affairs works closely with the administration, faculty, staff and students, especially the United Colors student organization, to create an atmosphere that is conducive to learning for students of color and that offers all students a chance to grow in their understanding of and appreciation for people from different racial and ethnic backgrounds.

## STUDENT LIFE AND LEADERSHIP

Student Life and Leadership: This office complements the academic program of studies as part of Scranton's overall educational experience through development of, exposure to, and participation in social, cultural, intellectual, recreational and governance programs. It encourages such things as positive and realistic self-appraisal, intellectual development, making appropriate personal and occupational choices, clarification of values, physical fitness, the ability to relate meaningfully with others, the capacity to engage in a personally satisfying and effective style of living, the capacity to appreciate cultural and ethnic differences, and the capacity to work independently and interdependently

The Office of Student Life and Leadership is located on the second floor of the Gunster Student Center and is open Monday through Friday from 8:30 a.m. to 4:30 p.m. (570-941-6233).

*Student Government* is an organization with the task of maintaining and improving all aspects of student life to provide a productive academic and social environment for the student body. Its familiar faces and widespread involvement give the campus life and energy. Its leadership consists of 43 elected student officers in the six divisions of Student Government: Executive Officers (3), Senators (4), Club Activities Board (2), Programming Board (12), Class Officers (16), and Student Life Board (6).

*Clubs and Organizations.* The University of Scranton encourages students to participate in many active clubs and organizations provided through the Office of Student Life and Leadership. These clubs and organizations encourage students to become immersed in

the campus community and their self-directed activities allow members to develop their leadership skills while meeting the goals of the club and the needs of its members.

### COMMUTER AND OFF-CAMPUS AFFAIRS

The University makes special efforts to insure that commuting students and those who live off campus have access to its academic and co-curricular programs and services through the Office of Commuter and Off-Campus Affairs and especially through the Commuter and Off-Campus Association (COCA). COCA includes a variety of programming opportunities such as:

*Commuter Council* - gives commuting students a formal way to voice their opinions, ideas and concerns.

*Commuter-in-Residence Program* - integrates commuting students in residence hall programming as an active part of a residence-hall floor.

*Commuter Mentor program* - connects upper-class commuting students with incoming freshman commuters.

Commuter and off-campus programming assists students who live apart from the immediate campus community with their pursuit of Jesuit educational ideals emphasizing tolerance and support for those who are different, living a healthy life, participation in cultural events of every kind and exploration of their talents and desires for growth.

The Commuter and Off-Campus Affairs Office is located on the second floor of the Gunster Student Center and is open Monday through Friday from 8:30 a.m. to 4:30 p.m. (570-941-7680).

## CAMPUS WOMEN'S CENTER

The Campus Women's Center fosters a campus community in which women and men can live in a climate of mutual respect, understanding and equality, and where women are encouraged to reach their fullest potential. It provides a safe, comfortable and educational environment in which students, faculty, staff and members of the community can learn about the current and historical role of women in society and where they can explore issues of gender equality, diversity and social justice.

Both women and men are encouraged to attend the Center's co-curricular programs on gender and diversity issues and to use its resource center for courses, special projects or personal enrichment. Books, periodicals, videos, tapes, internet access, and informational pamphlets are available for use, and the Center is also a place to learn about internship possibilities and conferences.

The Campus Women's Center's central location on the ground level of Fitch Hall and its comfortable atmosphere make it a place to get away from the daily stress of college life. There is always a need for volunteers to serve the campus community. Interested students can call (570) 941-6194 or visit the Center from 11:00 a.m. to 6:00 p.m. Monday through Thursday.

## CAREER SERVICES

Career Services helps students focus on career directions that are consistent with their unique talents, aspirations, and vision for living. Professional counselors can help students discover links between their personal traits and career options through individual counseling, workshops, the Career Journal Project and many other electronic and hard-copy resources available at the Career Services Office.

Students who are looking for related work experience while they are attending the University can benefit from the Career Experience Program and other internship-related

services. As students near graduation they can receive training in resume and cover-letter writing and in interview and job-search technique. They are also able to participate in employer on-campus recruiting visits, employment fairs, and the annual Law School Fair.

The Career Services Office is located on the second floor of The Gallery Building and is open from 8:30 a.m. to 6:00 p.m. Monday through Thursday and from 8:30 a.m. to 4:30 p.m. on Friday (570-941-7640).

## COUNSELING CENTER

Sometimes students have personal problems they may wish to discuss with a counselor. These may be related to the transition from high school to college or to decision-making regarding a variety of challenges that may occur for college students. These may also include such things as relationships, alcohol and other drug use, or family issues.

The Counseling Center is staffed by psychologists, certified counselors and a licensed social worker who are available to help students make the most they can out of their years at the University. Sometimes finding ways to talk about the stresses of life can make the difference between an average college experience and an exceptional one.

The Center, which is located on floor 2F of The Gallery Building, is open from 8:30 a.m. to 4:30 p.m. Monday through Friday. Later evening sessions may be available by appointment, and emergency crisis consultation is available from September through May while classes are in session on a 24-hour basis by contacting Public Safety 941-7777 to reach the counselor on-call. For Counseling Center appointments, students can call (570) 941-7620 or stop by the Center.

## INTERCOLLEGIATE ATHLETICS

The University is a Division III member of the National Collegiate Athletic Association (NCAA), the Middle Atlantic States Collegiate Athletic Conference (MAC), and Eastern College Athletic Conference (ECAC). The Intercollegiate Athletics Office is located in the John Long Center and is open Monday through Friday from 8:30 a.m. to 4:30 p.m.

*Men's Varsity Sports Roster*
Baseball
Basketball
Cross Country
Golf
Ice Hockey
Lacrosse
Soccer
Swimming
Tennis
Wrestling

*Women's Varsity Sports Roster*
Basketball
Cross Country
Field Hockey
Lacrosse
Soccer
Softball
Swimming
Tennis
Volleyball

The University of Scranton varsity athletic program has a tradition of success. In 1998, Joe Fent, a three-time conference champion, became the school's first cross-country All-American, and the field hockey team won an ECAC championship. In 1999-2000 the men's and women's basketball and the women's soccer and women's volleyball teams participated in the NCAA Division III national championship tournaments. Other notable achievements include two NCAA titles and four Final Four appearances for men's basketball and an NCAA championship and seven Final Four berths for the women's team – the latest at Danbury, Connecticut, in 2000. The men's soccer team has a record four consecu-

tive NCAA Final Four appearances.

In the Middle Atlantic Conference, Scranton has won 35 women's championships and 29 men's, for a combined total of 64. The men's and women's soccer teams have won 17 MAC championships and the women's team had a streak of seven straight from 1990 to 1996. In basketball, the men have won 15 conference titles, and the women's team has won 13.

The varsity program has produced many of the NCAA Division III's finest athletes, including 46 All-Americans. The women's basketball team has had 15 All Americans since 1980, including Kelly Halpin in 1998, 1999 and 2000. Deanna Kyle (1985) and Shelley Parks (1987) were National Players of the Year. Men's basketball has also had 13 All-Americans, with two in 1993. Men's soccer has produced 11 All-Americans, followed by women's soccer with eight.

The University's programs have produced 27 National Academic All-Americans since 1981. The University is a consistent leader in the Middle Atlantic Conference in the number of academic awards. In fall 1997, the women's cross-country team was ranked number two in the nation in grade-point average. Scranton has had two three-time GTE Academic All-Americans, 1996 graduate Clay Yeager in tennis and 1997 basketball All-American, Jennifer Nish.

## INTRAMURALS AND RECREATION

Housed in the Byron Recreational Complex, located at the south end of campus, the Intramurals and Recreation Department seeks to provide a comprehensive program of sports activities designed to appeal to the diverse needs and interests of the University community. Intramural leagues begin approximately the third week of each semester and include basketball, volleyball, walleyball, flag football, racquetball, tennis, soccer, whiffleball, badminton, softball and street hockey. Special one-day events are held on weekends throughout the year and include skiing, snow tubing, golf, a 5K run/walk, beach volleyball, and hiking.

In addition to structured programs, the Byron Complex also offers many opportunities for individual recreation. Cardiovascular training equipment (treadmills, cross-trainers, steppers, rowers, bikes and a Nordic Track skier) are located on the second level in the Murray Royals Fitness Center and can be reserved 24 hours in advance. Aerobics classes are conducted on a weekly schedule and can be attended on a drop-in basis. The recreation complex also houses three multi-purpose courts, four racquetball courts, a six-lane swimming pool, a dance-aerobics room, weight room, saunas, and steam rooms. In addition to indoor facilities, there is an outdoor basketball court, turfed utility field, and sand volleyball court located directly behind the recreation complex. A variety of recreational equipment may be obtained in the towel room with your student identification card. Whether you are looking for a competitive game of basketball, a high-impact aerobics class, or just a leisurely swim in the pool, the Intramural/Recreation Department has something for you.

The recreation center is open during regular semesters 7:00 a.m. through midnight, Monday through Thursday, and Friday from 7:00 a.m. to 10:00 p.m., Saturday from noon to 10:00 p.m. and Sunday from noon to midnight (570-941-6203).

## ORIENTATION

Orientation helps all new students, both freshman and transfer, with their transition to life at the University. The program is the link between the admissions process and students' arrival at the University for their first semester. The emphasis is on scheduling, academic and social integration and providing a natural connection to the strong sense of community at the University.

The Orientation Office is located on the second floor of the Gunster Student Center and is open from Monday through Friday from 8:30 a.m. to 4:30 p.m. (570-941-6233).

## RESIDENCE LIFE

The Residence Life system includes 13 freshman and 19 upper-class residences that provide secure and comfortable living spaces for study and personal development. Residence freshmen are assigned with their classmates to residence halls where they are supported in their academic programs, personal development and leadership opportunities by Residence Life Staff and Jesuit Counselors. Upper-class students may select from a range of housing options that include University houses, apartment buildings, suite-style halls with semi-private baths and traditional halls with single and double rooms. Upper-class students may also participate in the Gavigan Residential College and its Faculty Involvement Programs, or they can choose a Theme House that provides intense experiences in theatre, Spanish language and culture, education, technology, community service, wellness, fine arts and music, or international culture. The University also provides limited apartment-style housing for graduate students.The main goal of the residential experience is for each student to learn while living in this community environment. The process for this occurs through the active participation of the resident in his or her learning. Learning occurs best when students attempt to incorporate their in-class and extra-curricular experiences. In turn, programs and services offered through the Office of Residence Life are aimed at involving students in their learning.

The individual residential communities are designed for active student participation in their community. A basic expectation is for each student to respect the rights of other students. The privilege of living in a student residence is accompanied by the responsibility of positive community building.

Residence Life stresses the importance of high achievement in the academic and community realm. In turn, it is expected that students make healthy decisions regarding substances, stress and time management, relationships, and the exploration of their faith.

(For room-and-board fee and housing information, policies and guidelines, *see* "Student Expenses.")

The Office of Residence Life is located on the first floor of Nevils Hall and is open Monday through Friday from 8:30 a.m. to 4:30 p.m. (570-941-6226).

## STUDENT HEALTH SERVICES

Because maintaining good health is an essential part of success in college, Student Health Services is committed to helping students develop the knowledge, attitudes and skills they need for an optimum level of health and wellness. This involves health-promotion and prevention education as well as direct health services.

Student Health Services offers confidential health care to all University students in an ambulatory clinic in the Roche Wellness Center. Care includes unlimited visits for nursing assessment, primary treatment for illness and injury, health and wellness information and appointments with physicians or a nurse practitioner. Cooperative relationships with community health-care providers such as laboratories, pharmacies, hospitals and medical specialists complement the care offered on campus.

The Student Health Service operates from 8:30 a.m. until 6:00 p.m. Monday through Thursday and from 8:30 a.m. until 4:30 p.m. on Friday. There are three full-service hospitals within just a few blocks of the University which provide a full range of emergency and specialty services to students when necessary. Transportation to other health-care providers is provided through a special contractual agreement with an ambulance service that is available 24 hours a day, every day.

Because all health-care services provided to students on campus are covered by University fees, Student Health Services does no third-party billing. Care by community providers such as laboratory, x-ray, private physicians or specialists in the community, emergency-room visits or hospitals, however, are subject to private payment or insurance

coverage. All students should have health insurance and should know how to access coverage if necessary. Information about an optional insurance plan for students who do not have insurance coverage through another plan is available through Student Health Services.

## WELLNESS CENTER

In keeping with the Jesuit tradition of educating the whole person, the University Wellness Center encourages healthy life-style choices by providing educational programs and referrals for all students. Examples of past offerings include Smoking Cessation Workshops, Life-style/Stress Management Series, Care of an Intoxicated Friend Seminars and Nutritional Seminars. Current offerings are posted on campus each semester.

The Wellness Center also is home to the University's Peer Education programs. Peer Educators volunteer their time to provide formal educational presentations as well as individual referral assistance to their fellow students on issues related to alcohol and other drug use, sexual assault and HIV/AIDS. These "students helping students" gain valuable leadership experience, sharpen their communication skills and deepen their own understanding of these critical health issues. Students interested in applying to be a Peer Educator are encouraged to contact the Wellness Center or a current Peer Educator for further information.

The Wellness Center, at the corner of Mulberry Street and North Webster Avenue, is open from 8:30 a.m. until 4:30 p.m. Monday through Friday and evenings by appointment. For appointments, stop by the Wellness Center or call (570) 941-4253.

## PUBLICATIONS

The University offers a wide choice of journalism opportunities.

The *Aquinas* is the weekly All-American campus newspaper, and positions are available to all full-time undergraduate students.

*Esprit* is the award-winning campus literary journal.

History students have the opportunity to have their articles published in *Retrospect*, journal of the Royals Historical Society.

The yearbook, *Windhover*, is produced annually by students.

## THE UNIVERSITY BANDS AND SINGERS

The University Bands and Singers offer extremely high-quality instrumental and choral performing-ensemble opportunities in a variety of formats ranging from very large ensembles to small-ensemble and solo performances. Participation is open to any and all interested University students (as well as faculty, staff, and administration) with no individual audition requirement or enrollment or membership fee.

The programs of the University of Scranton Bands and Singers include an annual World Premiere Composition Series performance, the only series of its kind in the nation, which has received honor and acclaim from artists throughout the world. It has provided our students with opportunities to work and interact with internationally renowned composers and conductors and has made significant contributions to the wind and choral repertoires.

The Bands and Singers tradition of guest artists and clinicians has brought to our student musicians and our campus the joyful experience of performing with a long list of musical masters, among them Wynton Marsalis (who was here to accept an honorary doctorate from the University in 1996); George Young; Sam Pilafian and "Travelin' Light"; Robert Starer; Robert Kapilow; Joshua Rosenblum; T. Terry James; members of the New York, Philadelphia, Boston, Minnesota and Dallas Symphony Orchestras and the Lincoln Center Jazz Orchestra; members of the Empire Brass Quintet; and recently deceased composer-in-residence Vaclav Nelhybel, whose long and productive relationship with the University continues to be honored through close cooperation between the University and the Nelhybel Estate.

Hundreds of students participate in the ensembles every year, and are achieving their performance goals in the musical ensemble of their choice. Performance opportunities for university students who play stringed instruments are available on campus through a special relationship with the Sinfonia Youth Orchestra.

For more information on any of the program offerings of the University Bands and Singers please call Cheryl Y. Boga, Musical Director, or Frank Torquato, Assistant Director, at (570) 941-7624. e-mail bogac1@uofs.edu

## STUDENT CLUBS

Accounting Club
Administration Schrodinger Chemical Society (ACHCA) Student Association
Advertising Club
American College of Health Care
American Production Inventory
American Psychological Society Student Caucus
Association for Childhood Education International
Biology Club
Bowling Club
Business Club
Chemistry Club
College Democrats
College Republicans
Communications Club
Computer Science Club
Council for Exceptional Children
Criminal Justice Club
Drill Team/Color Guard
Enviromentally Concerned Organization
Habitat for Humanity
Health Administration Club
Health Administration Association
Health Professions Organization
History and Public Affairs Society
Horticulture Club
Human Resources Association
Human Service Association
India Club
Institute of Electrical & Electronic Engineers
International Students Association
Irish Society
Long Term Care Association
Marketing Club
Men's Volleyball
Nursing Association
Philosophy Forum
Physical Therapy Club
Pre-Law Society
Political Science Club
Psychology Club
Public Relations Student Society
Rangers Club
Royal Battalion
Royal Dance Ensemble
Royal Riders
Ski Club
Social Science Club
Society for Advancement of Management
Student Education Association
Student Occupational Therapy Club
Students for Life
The New Agenda
United Colors
University Singers
Veterans Club
Volunteer Community Outreach Efforts
Women's Business Honor Society
Women's Crew
Women's Rugby

A Club of the Year Award is annually presented to that student organization which most clearly exemplifies the University spirit through educational and social activities for club members and the University community. Winner of the Award for the past three years has been the Physical Therapy Club. A complete list of campus clubs and organizations is available on the student activities homepage on the web.

# OTHER EXTRACURRICULAR ACTIVITIES

## CAMPUS MINISTRY

As a Catholic institution, The University of Scranton is dedicated to promoting continued growth in personal maturity and freedom, especially as religious believers and persons dedicated to service of the human family. The specifically spiritual ministry of the entire University community is coordinated by the office of Campus Ministry assisted by the Jesuits, other clergy, University staff members and students themselves. Regular daily and Sunday liturgies and other special services are conducted in the Madonna della Strada chapel, St. Ignatius chapel, and in the dormitories. Spiritual counseling is available from the staff and the Jesuits, especially the Dormitory Counselors. These people make avail-

able their training, experience, and friendship to promote greater self awareness, maturity, integration, and ability to pray, as well as to identify obstacles to these and other goals.

Persons seeking time for quiet reflection, directed prayer or an experience of Christian community are invited to participate in frequent programs at nearby Chapman Lake. Campus Ministry also sponsors lectures and discussions on vital issues, organizes special events to heighten religious awareness, assists in services to the larger community, and is responsible to act as spokesman for justice within the University. In conjunction with Rev. Rees Warring of Elm Park Methodist Church and other local non-Catholic clergy, students of non-Catholic faiths are encouraged to help plan an expansion of services to themselves.

## DEBATE

The tradition of debate in Jesuit colleges and high schools is also strong at the University of Scranton. The Noel Chabanel Council of Debate gives interested students an opportunity to compete in debate and speech events on the intercollegiate level. University of Scranton debaters travel thousands of miles each year nationwide; the 1988 team took first honors in the finals of the Pennsylvania College Energy Debates.

## RADIO

WUSR, 99.5 FM, is a student operated radio station with over sixty participants. The format is eclectic with world, classical, jazz, urban and alternative music. In keeping with the University's mission the station produces public affairs programming and provides the community with an alternative to commercial radio. Students are encouraged to become involved with all aspects of the station, from on-air positions to management. The station broadcasts at 300 watts with a coverage area of 700 square miles, covering the Scranton/Wilkes-Barre metropolitan area, with an audience of over 250,000.

## TELEVISION

Royal Network News is a student group that produces a weekly news program that can be viewed on the campus cable station. The students shoot, edit, write, direct and produce this program. Students learn how to use cameras and editing equipment to produce the news stories. To get on-air experience, students act as reporters and anchors. The program is then put together in the television studio. RNN gives students hands-on experience in the production of a newscast. This same group has also produced basketball games and a comedy show.

## THEATRE

The tradition of theatre and dramatics in Jesuit colleges goes back for four-hundred years. The University of Scranton has played a vital part in that tradition as evidenced by the many theatre professionals who were undergraduates of the University: Pulitzer-Prize-winning dramatist Jason Miller; broadway actor and director, Walter Bobbie and director Stan Wojewodski Jr., Dean of the Yale School of Drama.

Today, the University Players, a co-curricular activity of the Department of English, produce a main-stage season along with a festival of student-written plays, and a festival devoted to new student directors. Well over 150 students participate, on and off stage, in productions each year. The theatre program is housed in a new state-of-the-art facility, complete with a 300-seat main stage and a studio theatre, scene shop, costume shop, and other support spaces.

The University Players have historically been host to many prominent guest artists. In 1984, Oscar-winning British actress Glenda Jackson conducted an acting workshop, actor Richard Harris directed a production of Julius Caesar in 1988, and Stan Wojewodski spoke at the opening of the theatre facility in 1994 and met with students.

Participation in the Players is open to all students, regardless of major. Interested students should contact the Director of Theatre in the McDade Center for Literary and Performing Arts, Room 103.

# University Directory

# BOARD OF TRUSTEES

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Madeleine Robinson
Jennifer Taylor, '98
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Vice President for Institutional Advancement

Thomas D. Masterson, S.J.
Vice President for University Ministries and University Chaplain

James T. Bryan
Vice President for Student Affairs

Abigail Byman
Secretary of the University, General Counsel

# ADMINISTRATION

*Office of the President*

Joseph M. McShane, S.J. (1998)
President of the University (1998)
Professor, Theology (1998)
A.B., A.M., Boston College
M.Div., S.T.M., Jesuit School of Theology
Ph.D., The University of Chicago

J.A. Panuska, S.J., D. et U. * (1982)
President Emeritus (1998)
B.S., Loyola College
Ph.L., St. Louis University
Ph.D., St. Louis University
S.T.L., Woodstock College

Dr. Rosemary Gray Bundy Watterson (1999)
Diversity and Equity Officer (1999)
A.A., Morristown College
B.A., Emory and Henry College
M.A., Catholic University
Ed.D., East Tennessee State University

Abigail Byman (1995)
Secretary of the University (1999)
General Counsel (1995)
B.A., Carleton College
J.D., University of Denver

William B. Hill, S.J., D. et U. * (1946-47, 1969)
Special Assistant to the President (1987)
Professor, English (1969)
A.B., Georgetown University
Ph.L., Woodstock College
M.A., Ph.D., Fordham University

Glenn R. Pellino (1980)
Executive Director, Office of Urban and Government Affairs (1997)
B.A., M.A., St. Louis University;
Ph.D. Cand., The University of Michigan

*Academic Affairs*

Provost and Vice President for Academic Affairs

Jerome P. DeSanto, D. et U.* (1979)
Associate Provost for Information Resources (1996)
B.S., M.B.A., The University of Scranton

Charles E. Kratz (1992)
Director of Library (1992)
B.A., M.A., University of Notre Dame
M.L.S., University of Maryland

Marie Angelella George (1993)
Director of Planning and Institutional Research (1999)
Associate Professor, Health Administration and Human Services (1999)
Chairperson, Health Administration and Human Resources (1996)
B.S., College Misericordia
M.S., The University of Scranton
Ph.D., University of Pennsylvania

* The Pro Deo et Universitate Award for Twenty Years or more Service to the University.

Susan Grogan Ikerd (1997)
Associate Provost
for Enrollment Mangement (1997)
B.A., M.A., Austin Peay State University

Robert Fetterhoff (1996)
Registrar (1996)
B.A., Fordham University

Joseph H. Dreisbach D. et U.* (1978)
Dean, College of Arts and Sciences (1997)
Professor, Chemistry (1989)
B.A., LaSalle University
M.S., Ph.D., Lehigh University

Mary F. Engel (1986)
Associate Dean, College of
Arts and Sciences (1986)
Director, Academic Advising Center (1987)
Director of Medical School Placement (1996)
Associate Professor, English (1986)
B.A., St. Bonaventure University;
L.L., Katholieke Universiteit te Leuven;
Ph.D., Kent State University

Shirley M. Adams (1986)
Dean, Dexter Hanley College,
Director of Instructional Development
and of Learning Resources Center (1986)
Associate Professor, Education (1996)
B.A., University of Northern Iowa;
M.A., University of Iowa;
Ph.D., Iowa State University

Rose Sebastinelli (2000)
Acting Dean, Graduate School (2000)
Acting Director of Research (2000)
Associate Professor, Operations and Information
Managment (1995)
B.S., Indiana University of Pennsylvania
Alperin Professor of Business Administration (1996)
Ph.D., The Pennsylvania State University

Ronald D. Johnson (1997)
Dean, Arthur J. Kania School
of Management (1997)
Professor, Mgmt/Mkt (1997)
B.S., M.B.A., D.B.A., Indiana University

James J. Pallante (1991)
Dean, Panuska College of
Professional Studies(1991)
Professor, Health Administration and
Human Resources (1991)
Professor, Education (1994)
B.A., La Salle University
M.S., Temple University
M.A., Glassboro State College
Ed.D., Rutgers University

*Finance*

David E. Christiansen (1987)
Vice President for Finance/Treasurer (1987)
B.S., M.B.A., LaSalle University

Darrell R. Frederick, SPHR (1996)
Director of Human Resources (1996)
B.S., Penn State University

Martin L. Langan, D. et U. * (1974)
Associate Vice President for Operations, (1988)
B.S., M.B.A., The University of Scranton

Edward J. Steinmetz, C.P.A. (1991)
Assistant Vice President for Finance (1993)
B.S., M.B.A., The University of Scranton

*Campus Ministry*

Thomas D. Masterson, S.J., D. et U.* (1976)
Vice President for University Ministries (1976) and
University Chaplain (1989)
Assistant Professor,
History/Political Science (1976)
A.B., M.A., Fordham University
Ph.L., S.T.B., S.T.L., Woodstock College
M.A., Ph.D., Georgetown University

*Student Affairs*

James T. Bryan (1988)
Vice President for Student Affairs (1988)
BS., State Univ. of New York at Fredonia
M.A., Michigan State University
Ed.D., Columbia University

*Institutional Advancement*

Robert J. Sylvester (1983)
Vice President for
Institutional Advancement (1983)
B.S., The University of Scranton
M.A., Fairfield University

# EMERITI

George V. Babcock, M.B.A., D. et U.* (1963)
Associate Dean, SOM
Department of Economics/Finance

Thomas N. Beckish, M.S. (1964)
Counselor/SOM Advising Center
Assistant Professor, Psychology

Marilyn Coar, B.A., D. et U.* (1948)
University Secretary Emerita

John R. Gavigan, A.B., D. et U. * (1950)
Vice President Emeritus

John S. Flanagan, M.S., D. et U. * (1974)
Vice President Emeritus

Zim E. Lawhon, M.S., D. et U. * (1964)
Department of Military Science
Registrar Emeritus

Bernard R. McIlhenny, S.J., M.A., S.T.B., D. et U.* (1958)
Dean Emeritus

Richard H. Passon, D et U. * (1964)
Provost and Vice President for Academic Affairs

Robert T. Ryder, M.B.A., D. et U. * (1946)
Vice President for Finance/Treasurer

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# FACULTY

## PROFESSORS EMERITI

Panos Apostolidis, Ph.D.
(1977-1989)
Department of Management/Marketing

John J. Baldi, M.S.S.W., D.S.S.
D. et U. * (1948-1981)
Department of Sociology

Richard J. Bourcier, Ph.D.
D. et U. * (1968-1993)
Department of Foreign Languages and Literatures

Edward J. Capestany, Ph.D.
D. et U.* (1968-1996)
Department of Philosophy

Frank A. Cimini, M.A.
D. et U. * (1941-1985)
Department of Foreign Languages and Literatures

John J. Clarke, Ph.D.
(1986-1995)
Department of Communication

James J. Cunningham, Ed.D
D. et U. * (1968-1997)
Department of Counseling/Human Services

Francis H. Curtis, M.Ed.
D. et U. * (1966-1993)
Department of Education

Joseph C. Dougherty, Ph.D.
D. et U. * (1967-1991)
Department of History/Political Science

Joseph T. Evans, Ph.D.
D. et U. * (1953-1993)
Department of Biology

A. John Giunta, Ph.D.
D. et U. * (1960-1993)
Department of Economics/Finance

Joseph M. Hamernick, S.J., S.T.B., M.A.
D. et U. * (1970-1993)
Department of Communication

Eileen B Hewitt, M.S.
(1982-1999)
Department of Management/Marketing

William B. Hill, S.J., S.T.L., Ph.D.
D. et U. * (1946-1947, 1969-1983)
Department of English

Daniel J. Houlihan, J.D.
D. et U. * (1947-1985)
Department of Accounting

Anne J. Jones, M.A.
D. et U. * (1967-1987)
Department of Fine Arts (1975-1986)

Raymond L. Kimble, Ed.D.
D. et U. * (1973-1993)
Department of Education

Lawrence J. Lennon, Ph.D.
D. et U. * (1946-1974)
Department of Psychology

Marianne McTighe, M.S.
D. et U. * (1946-1986)
Library

John J. Murray, Ph.D.
D. et U. * (1957-1988)
Department of English

Mildred A. Norton, M.S.
D. et U. * (1946-1988)
Library

Edward R. Powers, S.J., M.A., S.T.L.
D. et U.* (1955-1985)
Department of Math/Computer Science

John J. Quinn, S.J., Ph. D.
D. et U. * (1956-1992)
Department of English

Edward J. Rielly, Ph.D.
D. et U. * (1971-1997)
Department of Sociology/Criminal Justice

Angelina T. Scardamaglia, M.S.
D. et U. * (1947-1978)
Library

Larry R. Sherman, Ph.D.
D. et U. * (1981-1999)
Department of Chemistry

Cheng Hwa Siao, M.A., M.S.L.S.
D. et U. * (1969-1993)
Library

John K. Stout, Ed.D.
D. et U. * (1966-1997)
Department of Health Administration/Human Resources

Bernard D. Williams, M.A.
D. et U. * (1962-1997)
Department of History/Political Science

John C. Williams, M.S.
D. et U. * (1964-1990)
Department of Education

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# FACULTY OF INSTRUCTION

Brad A. Alford (1999)
Professor, Psychology (1993)
B.A., Millsaps College
M.A., Ph.D., University of Mississippi

Scott Bader-Saye (1997)
Assistant Professor, Theology/Religious Studies (1997)
B.A, Davidson College
M.Div., Yale Divinity School
Ph.D., Duke University

Patricia A. Bailey, R.N. (1983)
Professor, Nursing (1995)
B.S.N., Ed.M., Ed.D., Columbia University

Harold W. Baillie D. et U.* (1978)
Professor, Philosophy (1993)
A.B., Yale University
M.A., Ph.D., Boston College

Thomas E. Baker, D. et U. * (1975)
Assoc. Professor, Sociology/Criminal Justice (2000)
B.S., M.S., Virginia Commonwealth University
M.Ed., M.S., East Stroudsburg University

Galen L. Baril, D. et U. * (1975)
Assoc. Professor, Psychology (1985)
B.A., University of Nevada
Ph.D., University of Maine

Christopher Baumann (1984)
Professor, Chemistry (1998)
B.S., Oregon State University
Ph.D., University of Florida

Rebecca S. Beal (1983)
Professor, English (1995)
A.B., Westmont College
M.A., University of Chicago
Ph.D., University of Texas

John Begley, S.J. (1985)
Assoc. Professor, Theology/Religious Studies (1985)
A.B., M.A., Boston College
Ph.L., S.T.L., Weston College
S.T.D., Gregorian University

John A. Beidler, C.D.P., D. et U. * (1964)
Professor, Computing Sciences (1976)
A.B., King's College
M.A., Lehigh University
Ph.D., Pennsylvania State University

Paul R. Beining, S.J., D. et U. * (1949-1951, 1967)
Professor, Biology (1974)
B.S., Ph.L., Spring Hill College
S.T.L., Woodstock College
M.S., Ph.D., The Catholic University of America

Kenneth D. Belanger, Ph.D. (1998)
Assistant Professor, Biology (1998)
B.A., Luther College
Ph.D., Duke University

J. Brian Benestad, D. et U.* (1976)
Professor, Theology/Religious Studies (1989)
A.B., Assumption College
S.T.L., Gregorian University
Ph.D., Boston College

W. Andrew Berger (1989)
Assoc. Professor, Physics/Electrical Engineering (1994)
M.S., Technical University of Poznan, Poland
M.S., Ph.D., Drexel University

Robert M. Bessoir, D. et U. * (1968)
Professor, Exercise Science and Sport (1994)
B.S., The University of Scranton
M.S., East Stroudsburg University

Yaodong Bi (1991)
Assoc. Professor, Computing Sciences (1997)
B.S., M.S., Northeast University of Technology
Shenyang, People's Republic of China
Ph.D., University of Illinois

Gerald Biberman (1981)
Assoc. Professor, Management/Marketing (1987)
Chairperson, Management/Marketing (1992)
B.A., M.A., Ph.D., Temple University

David W. Black (1984)
Professor, Philosophy (1994)
B.A., Northern Illinois University
M,A., Ph.D., Pennsylvania State University

Mrigen Bose, D. et U. * (1968)
Assoc. Professor, Economics/Finance (1977)
B.S., Patna University
M.A., M.A.. University of Calcutta
M.S., University of Kentucky
Ph.D., University of Utah

Lori A. Bruch (1995)
Assistant Professor, Counseling and Human Services (1997)
B.S., M.Ed., The Pennsylvania State University
M.S., The University of Wisconsin-Stout
Ed.D. George Washington University

Alan L. Brumagim (1990)
Assoc. Professor, Management/Marketing (1996)
B.B.A., The Pennsylvania State University
M.B.A., Ph.D., Temple University

James P. Buchanan, D. et U.* (1977)
Assoc. Professor, Psychology (1981)
Chairperson, Department of Psychology (1993)
B.A., The Johns Hopkins University
M.A., Ph.D., University of California, Los Angeles

Timothy Cadigan, S.J. (1999)
Assistant Professor, Biology (1999)
B.S., St. Louis University
M.Div., Th.M. Weston School of Theology
M.S., Ph.D., Georgetown University

Cynthia Cann (1994)
Assistant Professor, Management/Marketing (1997)
B.S., M.B.A., The University of Scranton
Ph.D., Binghamton University

Michael C. Cann, D. et U. * (1975)
Professor, Chemistry (1988)
B.A., Marist College;
M.A., Ph.D., State University of New York at Stony Brook

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Joseph M. Cannon, D. et U. * (1959)
Professor, Education (1997)
B.S., The University of Scranton
M.Ed., Doctoral Studies, The Pennsylvania State University
Licensed Psychologist
J. Timothy Cannon (1981)
Professor, Psychology (1997)
B.S., University of Scranton;
Ph.D., University of Maine
Robert Jeffrey Cantrell (1995)
Assoc. Professor, Education (2000)
B.S., M.Ed., Ed.D., University of Virginia
Michael D. Carey D. et U.* (1978)
Professor, Biology (1990)
B.A., Wittenberg University
M.A., Ph.D., Indiana University
Brian Carpenter, C.M.A. (1987)
Professor, Accounting (1998)
M.B.A., The University of Scranton
B.S., Ph.D., The Pennsylvania State University
Alperin Teaching Fellow (1999)
Dona Carpenter, R.N. (1985)
Professor, Nursing (1999)
B.S.N., College Misericordia
M.S.N., Villanova University
M.Ed., Ed.D, Columbia University
Maureen T. Carroll (1995)
Assistant Professor, Mathematics (1998)
B.A., B.S., Ph.D., Lehigh University
Shani D. Carter (1998)
Assistant Professor, Health Administration/ Human Resources (1998)
B.A., M.S., Ph.D., Cornell University
Ellen Miller Casey, D. et U. * (1969)
Professor, English (1981)
B.S., Loyola University, Chicago;
M.A., University of Iowa
Ph.D., University of Wisconsin
Stephen J. Casey, D. et U. * (1969)
Assoc. Professor, Theology/Religious Studies (1981)
A.B., Iona College
M.A., Marquette University
Timothy K. Casey (1987)
Professor, Philosophy (1996)
B.A., Loras College
M.A., University of Pittsburgh
M.A., Ph.D., Duquesne University
Raymond W. Champagne, Jr., D. et U. * (1967)
Professor, History (1981)
A.B., Providence College
M.S., Duke University
Ph.D., Loyola University, Chicago
Leonard Champney, D. et U. * (1979)
Professor, Political Science (1992)
Chairperson, Political Science (1998)
B.S., University of Texas, El Paso
Ph.D., Rutgers University
Satya P. Chattopadhyay (1990)
Assoc. Professor, Management/Marketing (1997)
B.M.E., Jadaupur University;
P.G.D.M., Indian Institute of Management, Calcutta
Ph.D., Virginia Polytechnic Institute and State University
Ying I. Chien, D. et U. * (1979)
Assoc. Professor, Operations and Information Management (1979)
B.S., National Taiwan University
M.S., University of Manitoba
Ph.D., University of Kentucky
Jafor Chowdhury (1987)
Assoc. Professor, Management/Marketing (1993)
B. Comm., M. Comm., Dacca University
M.B.A., Dalhousie University
Ph.D., Temple University
Joseph F. Cimini, D. et U.* (1980)
Assoc. Professor, Sociology/Criminal Justice (1994)
B.A., The University of Scranton
J.D., Columbus School of Law,
The Catholic University of America
Thomas M. Collins (1989)
Assoc. Professor, Counseling and Human Services (1998)
B.S., Kutztown University
M.L.S., Rutgers University
Ed. M., Temple University
Ph.D., State University of New York at Albany
Licensed Psychologist
National Certified Counselor
Joseph W. Connolly (1983)
Professor, Physics/Electrical Engineering (1992)
B.S., The University of Scranton
M.S., University of Illinois
Ph.D., The Pennsylvania State University
Willis M. Conover D. et U.* (1978)
Professor, History (1993)
B.A., B.S., The Pennsylvania State University
M.S., Ed.D., Montana State University
John R. Conway (1985)
Assoc. Professor, Biology (1985)
B.S., The Ohio State University
M.A., Ph.D., University of Colorado
Barbara Cozza (1997)
Assistant Professor, Education (1997)
B.F.A., M.S., Hunter College
Ph.D., Fordham University
Frank P. Corcione (1978-1979, 1982)
Assoc. Professor, Economics/Finance (1982)
B.A., Moravian College
M.A., Ph.D., Lehigh University
Wayne H.J. Cunningham (1987)
Assoc. Professor, Operations and Information Management (1987)
B.S, M.B.A., Ph.D., The Pennsylvania State University

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Ronald W. Deitrick (1998)
Assoc. Professor, Exercise Science and Sport (1998)
A.B., Villanova University
M.S., University of Utah
Ph.D., University of Maryland

Michael D. DeMichele, D. et U. * (1967)
Professor, History (1974)
Chairperson, Department of History (1998)
B.S., The University of Scranton
M.A., Ph.D., The Pennsylvania State University

Vito DelVecchio, D. et U. * (1969)
Professor, Biology (1977)
B.A., The University of Scranton
M.S., St. John's University
Ph.D., Hahnemann Medical College Graduate School

Jones DeRitter (1990)
Chairperson, Department of English (1999)
Assoc. Professor, English (1995)
A.B., Oberlin College
M.A., Ph.D., University of Virginia

Linda H. Desmond, R.N. (1987)
Assistant Professor, Nursing (1990)
R.N., Beebe Hospital School of Nursing
B.S.N., Cedar Crest College
M.S.A.N., University of Delaware
Ed.D., Columbia University

Trudy A. Dickneider (1984)
Professor, Chemistry (1997)
B.A., M.A., St. Joseph's College
Ph.D., University of Miami

Mary Jane DiMattio (1993)
Assistant Professor, Nursing (1999)
B.S., The University of Scranton
M.S.N., Villanova University

Anthony J. DiStefano, D. et U. * (1968)
Assoc. Professor, Physics/ Electrical Engineering (1977)
B.E.E., Brooklyn Polytechnic Institute
M.A., Columbia University
Ph.D., Stevens Institute of Technology

Roy Palmer Domenico (1997)
Assoc. Professor, History (1999)
B.A., University of Wisconsin
M.A., University of Connecticut
Ph.D., Rutgers University

Steven T. Dougherty (1992)
Assoc. Professor, Mathematics (1997)
B.S., The University of Scranton
M.S., Ph.D., Lehigh University

Katie S. Duke (1985)
Assoc. Librarian (1990)
B.A., California Baptist College
M.L.S., University of Oklahoma
M.S., The University of Scranton

Josephine M. Dunn (1988)
Assoc. Professor, History (1998)
B.A., B.F.A. University of Houston
M.A., Ph.D., University of Pennsylvania

John J. Dunstone, D. et U. * (1966)
Professor, Psychology (1974)
B.S., The Pennsylvania State University
M.S., Ph.D., University of Massachusetts

Michael Dutko (1985-1989, 1991)
Assoc. Professor, Mathematics (1993)
B.S., The Pennsylvania State University
A.M., The University of Michigan
Ph.D., Pennsylvania State University

Kathleen G. Dwyer (1988)
Assoc. Professor, Biology (1993)
B.S., East Stroudsburg University
M.A., Ph.D., Princeton University

Gary E. Eichelsdorfer, D. et U. * (1965)
Assoc. Professor, Mathematics (1979)
A.B., Gannon College
M.A., University of Detroit

Laura Helene Ellis, C.P.A. (1994)
Assistant Professor, Accounting (1994)
B.A., Carroll College
M.Acc., University of Montana
Ph.D., University of Oregon

Lee Ann Eschbach (1986)
Assoc. Professor, Counseling and Human Services (1995)
B.S., M.S., Ph.D., Washington State University

Paul Fahey, D. et U. * (1968)
Professor, Physics/Electrical Engineering (1978)
B.S, The University of Scranton
M.S., Ph.D., University of Virginia

Matthew J. Fairbanks, D. et U. * (1960)
Professor, Philosophy (1970)
B.S., M.A., Loyola University, Chicago
Ph.D., University of Notre Dame

Marian Farrell, R.N. (1990)
Assoc. Professor, Nursing (1995)
B.S.N., M.S.N., College Misericordia
M.S., Syracuse University
Ph.D., Adelphia University

Anthony Ferzola (1990)
Assoc. Professor, Mathematics (1990)
B.A., Queens College
M.A., Ph.D., New York University

Mary Anne Foley, C.N.D. (1991)
Assoc. Professor, Theology and Religious Studies (1997)
B.A., Sacred Heart University
M.T.S., Weston School of Theology
M. Phil., Ph.D., Yale University

Timothy Daniel Foley (1999)
Assistant Professor, Chemistry (1999)
B.S., Providence College
Ph.D., University of Rhode Island

Daniel V. Fraustino (1982)
Professor, English (1991)
B.A., State University of New York at Buffalo
M.A., San Diego State University
Ph.D., Binghamton University

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Brigid Curtin Frein (1988)
Assoc. Professor, Theology/Religious Studies (1994)
Chairperson, Department of Theology/ Religious Studies (1995)
B.A., Gonzaga University
Ph.D., St. Louis University

Michael Friedman (1991)
Assoc. Professor, English (1995)
B.A., Tulane University
M.A., Ph.D., Boston University

David O. Friedrichs, D. et U.* (1977)
Professor, Sociology/Criminal Justice (1991)
A.B., University College of New York
M.A., New York University

Joseph A. Fusaro, D. et U.* (1974)
Professor, Education (1983)
B.A., Rider College
M.Ed., University of Vermont
Ed.D., State University of New York at Albany

Rosellen M. Garrett, CRNP, D. et U.* (1980)
Assoc. Professor, Nursing (1980)
B.S.N., College Misericordia
M.S., University of Maryland
F.N.P., Binghamton University
Ph.D., Medical College of Pennsylvania

Darla Rae Germeroth (1989)
Professor, Communication (2000)
B.A., M.A., Kansas State University
Ph.D., University of Denver

Thomas W. Gerrity, D. et U.* (1976)
Assoc. Professor, Education (1986)
B.S., University of Pennsylvania
M.S., The University of Scranton
Ed.D., Columbia University

Satyajit P. Ghosh (1986)
Professor, Economics/Finance (1999)
Chairperson, Department of Economics/Finance (1993)
B.A., Presidency College, India
M.A., University of Calcutta
M.A., Ph.D, State University of New York at Buffalo

S. Kingsley Gnanendran (1989)
Assoc. Professor, Operations and Information Management (1995)
B.S.c., University of Sri Lanka
M.Eng., Asian Institute of Technology
Ph.D., University of Tennessee

Irene Goll (1988)
Assoc. Professor, Management/Marketing (1994)
B.S., The Pennsylvania State University
M.A., University of Illinois
Ph.D., Temple University

Deborah J. Gougeon, D. et U * (1979)
Assoc. Professor, Operations and Information Management (1988)
B.S., M.S., The University of Scranton
Ph.D., Walden University

Leonard G. Gougeon, D. et U * (1979)
Professor, English (1982)
B.A., St. Mary's University, Halifax
M.A, Ph.D, University of Massachusetts

Ralph W. Grambo, Jr., D. et U.* (1973)
Assoc. Professor. Economics/Finance (1978)
B.S., The University of Scranton
M.B.A., Ph.D., University of Pennsylvania

Ronald J. Grambo,C.P.A., D. et U.* (1976-77; 1980)
Assoc. Professor. Accounting (1985)
B.S., M.B.A., The University of Scranton
M.S., The University of Scranton
Ph.D., The Pennsylvania State University

Marybeth Grant-Beuttler, M.S., P.T. (1998)
Instructor, Physical Therapy (1999)
B.S., Northwestern University Medical School
M.S., University of North Carolina at Chapel Hill

David Hair (1986)
Assistant Professor, Exercise Science and Sport (1991)
B.S., M.Ed., East Stroudsburg University
M.S., The University of Scranton

Renee M. Hakim (1996)
Assistant Professor, Physical Therapy (1996)
B.S., The University of Scranton
M.S., University of Pittsburgh

David W. Hall (1985)
Assoc. Professor, Counseling and Human Resources (1991)
A.B., Lycoming College
M.S., The University of Scranton
Ph.D., The Pennsylvania State University
Licensed Psychologist
National Certified Counselor
Certified Rehabilitation Counselor

Joyce Hanks (1989)
Professor, Foreign Languages and Literatures (1995)
M.A., University of Wisconsin
B.A., Ph.D., Washington University

Mary Jane Hanson (1996)
Assoc. Professor, Nursing (2000)
B.S.N., Cedar Crest College;
M.S.N., Ph.D., University of Pennsylvania

Michael A. Hardisky (1984)
Chairperson, Department of Biology (1999)
Professor, Biology (1995)
B.S., Lebanon Valley College
M.S., Ph.D., University of Delaware

Patricia Harrington, R.N. (1984)
Assoc. Professor, Nursing (2000)
Chairperson, Department of Nursing (1994)
B.S., Medgar Evers College
M.S., Hunter-Bellevue School of Nursing;
M.Ed., Ed.D, Columbia University

Jean Wahl Harris (1987)
Assoc. Professor, Political Science (1993)
B.A., M.A., Ph.D., Binghamton University

* The Pro Deo et Universitate Award for Twenty Years or more Service to the University.

Maurice I. Hart, Jr., D. et U. * (1963)
Professor, Chemistry (1971)
A.B., Maryknoll College
M.S., Ph.D., Fordham University

John M. Hill (1981)
Professor, English (2000)
B.A., Central College
M.A., University of Illinois
M.F.A., University of Iowa
Ph.D. Cand., University of Illinois

Tim Hobbs (1997)
Assistant Professor, Education (1997)
B.A., M.A., Sonoma State University
Ph.D., Florida State University

Thomas P. Hogan (1985)
Professor, Psychology (1985)
B.A., John Carroll University
M.A., Ph.D., Fordham University

Frank X.J. Homer, D. et U. * (1968)
Professor, History (1984)
A.B., The University of Scranton
M.A., Ph.D., University of Virginia

John S. Hopkins, D. et U. * (1967)
Assistant Professor, Exercise Science and Sport (1970)
B.S., East Stroudsburg University
M.S., University of Massachusetts

Sharon Hudacek, R.N. (1990)
Assoc. Professor, Nursing (1995)
B.S.N., M.S.N., College Misericordia
M.Ed., Ed.D., Columbia University

Robert E. Hueston, D. et U. * (1968)
Assoc. Professor, History (1976)
A.B., College of the Holy Cross
M.A., Ph.D., University of Notre Dame

Riaz Hussain, D. et U. * (1967)
Assoc. Professor, Economics/Finance (1985)
B.S., Forman College, Pakistan
M.S., University of Punjab, Pakistan
M.B.A., The University of Scranton
Ph.D., Johns Hopkins University
Ph.D., Lehigh University
Chartered Financial Analyst

Moses N. Ikiugu (1999)
Instructor, Occupational Therapy (1999)
B.A., M.A., United States International University
Ph.D. (cand) Texas Woman's University

Paul M. Jackowitz, C.D.P., C.C.P., D. et U. * (1977-80; 1982)
Assistant Professor, Computing Sciences (1982)
B.S. The University of Scranton
M.S., Rensselaer Polytechnic Institute

Elizabeth J. Jacob (1998)
Assistant Professor, Counseling/Human Services (1998)
B.A., New York University
M.S., The University of Scranton
Ph.D., Lehigh University

Jakub S. Jasinski (1987)
Professor, Mathematics (1999)
Chairperson, Department of Mathematics (1996)
M.S., Ph.D. University of Gdansk

Bernard J. Johns, D. et U. * (1961)
Assoc. Professor, Mathematics (1979)
A.B., Wilkes College
M.A., Bucknell University

Maria Poggi Johnson (1996)
Assistant Professor, Theology/Religious Studies (1996)
B.A., Oxford University
Ph.D., University of Virginia

Roxanne T. Johnson (1993)
Assoc. Professor, Accounting (1999)
B.A., University of Delaware
B.B.A., University of Florida
Ph.D., The Pennsylvania State University

Lynn C. Jones (1998)
Assistant Professor, Sociology/Criminal Justice (1998)
B.S., Trinity University
M.A., The University of Arizona
Ph.D. The University of Arizona

Francis X. Jordan, D. et U. * (1966)
Assoc. Professor, English (1976)
Chairperson, Department of English (1987)
A.B., M.A., The University of Scranton
Ph.D., St. Louis University

Prasadarao V. Kakumanu D. et U.* (1978)
Professor, Operations and Information Management (1984)
Chairperson, Department of Operations and Information Management (1987)
B.S., Andhra University
M.S., Patna University
M.S., Delhi University
Ph.D., Cornell University

John R. Kalafut, D. et U. * (1965)
Professor, Physics/Electrical Engineering (1974)
B.S., The University of Scranton
M.S., University of Delaware

John Kallianiotis (1990)
Assoc. Professor, Economics/Finance (1996)
B.A., University of Thessalonika
M.A., M.Ph., Ph.D., City University of New York

Thomas A. Kamla D. et U.* (1978)
Professor, Foreign Languages and Literatures (1987)
B.A., St. John's University, Minnesota
M.A., Ph.D., University of Wisconsin

Jack Kasar (1993)
Assistant Professor, Occupational Therapy (1993)
Chairperson, Department of Occupational Therapy (1994)
B.A., West Chester University
M.S., Virginia Commonwealth University
Ph.D., University of Pennsylvania

Jan W. Kelly (1988)
Assoc. Professor, Communication (1988)
B.A., The Pennsylvania State University
M.A., San Francisco State University
Ph.D., University of Minnesota

* The Pro Deo et Universitate Award for Twenty Years or more Service to the University.

Lawrence W. Kennedy (1992)
Assoc. Professor, History (1998)
A.B., A.M., Ph.D., Boston College

Stephen L. Klingman, D. et U.* (1973)
Assistant Professor, Exercise Science and Sport (1977)
B.S., M.S., Ithaca College

Richard Klonoski (1981)
Professor, Philosophy (1994)
B.A., The University of Scranton
M.A., Kent State University
Ph.D., Duquesne University

Michael J. Knies (1996)
Assistant Professor, Library (1998)
B.A, M.A., The Pennsylvania State University
M.L.S., Rutgers University

Robert Kocis (1989)
Professor, Political Science (2000)
B.A., St. Vincent College
M.A., Ph.D., University of Pittsburgh

M. Jane Kopas, O.S.F. D. et U.* (1978)
Professor, Theology/Religious Studies (1993)
B.S., M.A., St. Bonaventure University
Ph.D., Graduate Theological Union

Edmund M. Kosmahl (1983)
Professor, Physical Therapy (2000)
Chairperson, Physical Therapy (2000)
B.S., M.S., Temple University
Ed.D., Nova University

Gary G. Kwiecinski (1988)
Professor, Biology (2000)
B.S., Cornell University
M.S., Rutgers University
Ph.D., Cornell University

Robyn Lawrence (1993)
Assoc. Professor, Accounting (2000)
B.S., University of California
M.S., California State University
Ph.D., University of Houston

Linda Ledford-Miller (1985)
Professor, Foreign Languages and Literatures (1999)
B.A., University of California, Irvine
M.A., The Pennsylvania State University
M.A., Ph.D., University of Texas at Austin

Peter M. Leininger (1999)
Lecturer, Physical Therapy (1999)
B.A., University of Michigan
M.S. Boston University

John J. Levko, S.J., D. et U.* (1979)
Professor, Mathematics (1987)
Director, Eastern Christian Studies (1986)
B.A., M.S., Ph.D., Lehigh University
S.T.B., Gregorian University
M.A., John XXIII Institute, Maryknoll
S.E.O.L., S.E.O.D., Pontifical Oriental Institute, Rome, Italy

Frank B. Linton (1997)
Assistant Professor, Accounting (1997)
B.A., Hofstra University;
J.D., New York University School of Law
Ph.D., University of Houston

Deborah Eville Lo (1995)
Assistant Professor, Education (1995)
B.S., M.S., Florida State University
Ph.D., University of Chicago

Frank J. MacEntee, S.J., D. et U. * (1965)
Professor, Biology (1973)
B.S., Spring Hill College
M.S., Ph.D., The Catholic University of America

Marjorie A. Maddox, ANP (1997)
Assoc. Professor, Nursing (1997)
B.S.N., University of Virginia
M.S.N., St. Louis University
Ed.D., University of Georgia

Daniel Mahoney, C.P.A. (1984)
Assoc. Professor, Accounting (1996)
B.S., M.B.A., The University of Scranton
Ph.D., Syracuse University

David E. Marks (1999)
Lecturer, Library (1999)
A.A., Catonsville Community College
B.S., University of Baltimore
M.S., University of Maryland

Dennis S. Martin (1985)
Assoc. Professor, Computing Sciences (1985)
B.S., Manhattan College
M.A., University of Rochester
M.S., Ed.D., State University of New York at Buffalo

David E. Marx (1987)
Assoc. Professor, Chemistry (1992)
Chairperson, Department of Chemistry (1998)
B.S., East Stroudsburg University
Ph.D., Binghamton University

Susan Fournier Mathews (1988)
Professor, Theology/Religious Studies (2000)
B.A., St. Anselm College
M.A., Ph.D., The Catholic University of America

Gary E. Mattingly (1983)
Professor, Physical Therapy (1997)
B.S., St. Ambrose College
B.S., The University of Scranton
Ph.D., St. Louis University

Tata J. Mbugua (1998)
Assistant Professor, Education (2000)
B.A., Nairobi University
M.A., Ph.D., Ohio University

Robert McCloskey, (1991)
Assistant Professor, Computing Sciences (1993)
B.S., The University of Scranton
M.S., Ph.D., Rensselaer Polytechnic Institute

Christine E. McDermott , D. et U.*(1979)
Assistant Professor, Biology (1979)
B.A., California State University at Fresno
Ph.D., University of Tennessee

John W. McGinley, D. et U. * (1970)
Professor, Philosophy (1979)
A.B., College of the Holy Cross
Ph.D., Boston College

* The Pro Deo et Universitate Award for Twenty Years or more Service to the University.

Roberta Walsh McHale, R.N. (1998)
Assistant Professor, Nursing (1998)
B.S.N., Marywood College
M.S., The Pennsylvania State University
Ph.D., University of Maryland at Baltimore

John M. McInerney, D. et U.* (1966)
Professor, English (1977)
A.B., LeMoyne College
M.A., Ph.D., Loyola University, Chicago

Robert L. McKeage, D. et U.* (1974)
Assoc. Professor, Marketing/Management (1993)
B.S., M.B.A., The University of Scranton
M.A., Lehigh University
Ph.D., Temple University

Ronald H. McKinney, S.J. (1984)
Professor, Philosophy (1996)
B.A., University of Maryland
M.Div., Th.M., Weston School of Theology
M.A., Ph.D., Fordham University

Mary Helen McSweeney (1999)
Assistant Professor, Health Administration/ Human Resources (1999)
B.A., Wellesley College
M. Phil., MIA, Columbia University
Ph.D., Graduate School of the City University of New York

Robert J. McTeigue, S.J., (1997)
Assistant Professor, Philosophy (1997)
B.A., M.A., Ph. D., The Catholic University of America
M. Th., Heythrop College, University of London

Sharon M. Meagher (1989)
Assoc. Professor, Philosophy (1995)
B.A., Boston College
Ph.D., State University of New York at Stony Brook

Michael Ofosu Mensah (1987)
Assoc. Professor, Accounting (1992)
Chairperson, Department of Accounting (2000)
B.S., University of Ghana
M.B.A., N.E. Louisiana University
Ph.D., University of Houston

Rebecca L. Mikesell (1994)
Assistant Professor, Communication (1994)
B.S., M.S., Illinois State University
Ph.D., Ohio University

Patrick Mohr, S.J., D. et U.* (1975)
Professor, Philosophy (1991)
B.A., M.A., Spring Hill College
Ph.D., Georgetown University

Kenneth G. Monks (1990)
Professor, Mathematics (2000)
B.S., The Pennsylvania State University
M.S., Ph.D., Lehigh University

Kathleen K. Montgomery (1998)
Assistant Professor, Education (1998)
B.S., Mansfield State University
M.A., George Washington University
D. Ed., The Pennsylvania State University

Oliver J. Morgan, Ph.D.(1990)
Assoc. Professor, Counseling and Human Services (1996)
Chairperson, Department of Counseling and Human Resources (1997)
B.A., Fordham University
M.F.T., Hahnemann Medical University
M. Div., Weston School of Theology
Ph.D., Boston University

Mary Elizabeth Moylan (1986)
Assoc. Professor (1995)
Assistant Librarian II (1990)
B.A., Marywood University
M.L.S., Villanova University
M.S., The University of Scranton

Mary E. Muscari (1992)
Assoc. Professor, Nursing (1997)
B.S.N., Pace University
M.S.N., P.N.P., Columbia University
Ph.D., Adelphi University

Donna M. Narsavage-Heald (1993)
Assoc. Professor, Chemistry (1999)
B.S., The University of Scranton
M.S., Ph.D., Rensselaer Polytechnic Institute

Hong V. Nguyen , D. et U.*(1979)
Assoc. Professor, Economics/Finance (1985)
B.S., State University of New York at Brockport
M.A., Ph.D., Binghamton University

John C. Norcross (1985)
Professor, Psychology (1990)
B.A., Rutgers University
M.A., Ph.D., University of Rhode Island
Clinical Internship, Brown University School of Medicine
Licensed Psychologist

Kevin M. Nordberg, D. et U. * (1970)
Professor, Philosophy (1989)
A.B., Assumption College
M.A., Ph.D., University of Notre Dame

Kevin R. Norris, D. et U.,* (1977)
Assistant Librarian II (1981)
B.S., M.L.S., University of Pittsburgh
M.A., The University of Scranton

John J. O'Malley, D. et U* (1968)
Assoc. Professor, Psychology (1971)
B.S., The University of Scranton
M.S., Ph.D., Ohio University

Michael O'Steen (2000)
Assistant Professor, English (2000)
B.F.A., M.F.A., Carnegie Mellon University

Peter C. Olden (1993)
Assoc. Professor, Health Administration and Human Resources (1999)
Chairperson, Health Administration and Human Resources (1998)
B.S., Miami University
M.H.A., Duke University
Ph.D., Virginia Commonwealth University

* The Pro Deo et Universitate Award for Twenty Years or more Service to the University.

Masood Otarod (1988)
Assoc. Professor, Mathematics (1994)
B.S., Pahlavi University
M.S., Sc.D. Columbia University

Ann A. Pang-White (1997)
Assistant Professor, Philosophy (1997)
B.A., Tung-Hai University
M.A., University of South Carolina-Columbia
Ph.D., Marquette University

William J. Parente (1970)
Professor, Political Science (1973)
A.B., Xavier University
Ph.D., Georgetown University

Robert A. Parsons, D. et U.* (1979)
Professor, Foreign Languages and Literatures (1991)
Chairperson, Department of Foreign Languages and Literatures (1988)
B.A., M.A., West Virginia University
M.A., Ohio University
Ph.D., The Pennsylvania State University

Lee M. Penyak (2000)
Assistant Professor, History (2000)
B.A., Fairfield University
M.A., Ph.D., University of Connecticut

Paul M. Perdew (1985)
Assoc. Professor, Mathematics (1985)
B.A., Washington and Jefferson College
M.A., University of Hawaii
Ph.D., University of Idaho

Njegos Petrovic, D. et U.* (1967)
Professor, Foreign Languages and Literatures (1974)
A.B., Classical College, Belgrade, Yugoslavia
M.A., Ph.D., University of Montreal

Virginia A. Picchietti (1995)
Assistant Professor, Foreign Languages and Literatures (1995)
B.A., Rosary College
M.A., Ph.D., Indiana University

Dalphia Raye Pierce (1998)
Assistant Professor, Education (1998)
B.A., Texas Tech University
M.Ed., Ed.D., University of Houston

Charles Pinches (1990)
Professor, Theology/Religious Studies (1996)
B.A., Wheaton College;
M.A., Ph.D., University of Notre Dame

Richard Plishka (1986)
Assoc. Professor, Computing Sciences (1989)
Chairperson, Department of Computing Sciences
B.S., The University Of Scranton
M.S., M.B.A., Syracuse University

Russell Poling (1999)
Lieutenant Colonel, U.S. Army
Professor, Military Science (1999)

Susan Poulson (1990)
Assoc. Professor, History (1996)
B.A., George Washington University
M.A., Ph.D., Georgetown University

Satyanarayana Prattipati (1990)
Assoc. Professor, Operations and Information Management (1996)
B.S., Andhra University
M.B.A., Indian Institute of Management
Ph.D., State University of New York at Buffalo

John B. Pryle, D. et U. * (1967-1969; 1972)
Assistant Professor, Sociology/Criminal Justice (1972)
Chairperson, Department of Sociology/ Criminal Justice (1989)
B.S., The University of Scranton
M.A., Fordham University

Joseph L. Quinn, S.J., D. et U.* (1979)
Assistant Professor, English (1979)
A.B., Ph.L., A.M., Fordham University
S.T.B., Woodstock College
A.M., Ph.D., Harvard University

Murli Rajan, C.F.A., (1989)
Assoc. Professor, Economics/Finance (1995)
B.C.A., Victoria University
M.Comm., Delhi School of Economics, University of Delhi
M.B.A., The University of Scranton
Ph.D., Temple University

William V. Rakauskas, D. et U. * (1969)
Professor, English (1979)
B.S., M.A., The University of Scranton
Ed.D., Temple University

Donna D. Ramos, D. et U.* (1974)
Assistant Librarian II (1978)
B.A., State University of New York at New Paltz;
M.S.L.S., State University of New York at Geneseo

Matthew M. Reavy (1998)
Assistant Professor, Communication (1998)
B.A., M.A., The University of Scranton
Ph.D., University of Missouri - Columbia

Carol Reinson (1997)
Instructor, Occupational Therapy (1997)
A.A.S., Herkimer County Community College
B.S., Utica College
M.S., State University of New York at New Paltz

Vivian V. Ripley (1998)
Assistant Professor, Counseling/Human Services (1998)
B.S., Trenton State College
M.S., Ed.D., University of Virginia

Joan Robbins (1991)
Assoc. Professor, English (1997)
B.A., Boston College;
M.F.A., D. F.A., Yale School of Drama

John B. Robertson, Jr. D. et U. * (1969)
Assistant Professor, Exercise Science and Sport (1969)
B.S., Springfield College
M.A., Trenton State College

* The Pro Deo et Universitate Award for Twenty Years or more Service to the University.

Richard W. Rousseau, S.J., D. et U.* (1979)
Professor, Theology/Religious Studies (1979)
A.B., M.A., Boston College
S.T.L., Facultees St. Albert de Louvain, Belgium
S.T.D., St. Paul's University, Ottawa
Ph.D., University of Ottawa

William Rowe (1990)
Professor, Philosophy (1996)
Chairperson, Philosophy (1995)
B.A., Allegheny College
M.A., Pittsburgh Theological Seminary
M.Phil., Institute for Christian Studies
Ph.D., Duquesne University

David A. Rusak (2000)
Assistant Professor, Chemistry (2000)
B.S., University of North Carolina
Ph.D., University of Florida

Midori Y. Rynn, D. et U.* (1975)
Professor, Sociology/Criminal Justice (1992)
B.A., Sophia University
M.A.L.S., The University of Michigan
M.A., Ph.D., Michigan State University

Thomas F. Sable, S.J. (1985)
Assoc. Professor, Theology/Religious Studies (1991)
B.A., Boston College
M.S., Georgetown University;
M. Div., Jesuit School of Theology
Ph.D., Graduate Theological Union

Robert P. Sadowski (1987)
Chairperson, Department of Communication (1998)
Professor, Communication (1987)
B.A., Michigan State University
M.S., Syracuse University
Ph.D., University of Iowa

John P. Sanko (1990)
Assoc. Professor, Physical Therapy (1997)
B.S., M.S., East Stroudsburg State College
Ed.D., Columbia University

Edward M. Scahill (1989)
Assoc. Professor, Economics/Finance (1994)
B.S., St. Bonaventure University
M.A., Ph.D., Binghamton University

Carl Schaffer (1988)
Assoc. Professor, English (1991)
B.A., Farleigh Dickinson University
M.A., The University of Michigan
M.F.A., University of Iowa

Robert W. Shaffern (1995)
Assistant Professor, History (1995)
B.A., DePaul University
M.A., Ph.D., University of Notre Dame

Marc B. Shapiro (1996)
Assistant Professor, Theology/Religious Studies (1996)
B.A., Brandeis University
Ph.D., Harvard University

James R. Sidbury (1983)
Assoc. Professor, Computing Sciences (1983)
B.S., Duke University
M.S., Ph.D., Auburn University

Joyce Simcoe Simutis (1997)
Instructor, English (1997)
B.A., State University of New York at Buffalo
M.A., Ph.D.., University of Illinois at Urbana-Champaign

Ronald Sinzdak, D et U.* (1962-65; 1970)
Assoc. Professor, Mathematics (1974)
B.S., King's College
M.A., Fordham University
Ph.D., University of Missouri

Carole S. Slotterback (1995)
Associate Professor, Psychology (2000)
B.S., Wilson College
M.S., New Mexico Highlands University
Ph.D., Northern Illinois University

Robert A. Spalletta (1983)
Assoc. Professor, Physics/Electrical Engineering (1991)
Chairperson, Department of Physics/Electrical Engineering (1995)
B.S., Stevens Institute of Technology
MS., Ph.D., University of Rochester

J. Michael Strong, D et U. * (1972)
Assoc. Professor, Exercise Science and Sport (1982)
B.S., Concord College
M.S., West Chester State College

Michael Sulzinski (1990)
Assoc. Professor, Biology (1995)
B.S., The Pennsylvania State University
Ph.D., Cornell University

Delia A. Sumrall (1992)
Assoc. Professor, Management/Marketing (1995)
B.S., M.B.A., University of Southern Mississippi
D.B.A., Mississippi State University

Terrence E. Sweeney (1992)
Assoc. Professor, Biology (1998)
B.A., Colgate University
M.S., Ph.D., University of Rochester

Narda Tafuri (1994)
Assistant Professor, Library (1996)
B.A., State University of New York at Oneonta
M.A., New York University
M.S., State University of New York at Albany

Nabil Tamimi (1993)
Assoc. Professor, Operations and Information Management (1997)
B.S., The Pennsylvania State University
M.B.A., The University of Scranton
Ph.D., Temple University

Charles E. Taylor, C.D.P., D. et.U.* (1974)
Assoc. Professor, Computing Sciences (1983)
B.S., M.B.A., West Virginia University

Len Tischler (1990)
Assoc. Professor, Management/Marketing (1997)
B.A., Wabash College
M.B.A., Ph.D., University of Maryland

* The Pro Deo et Universitate Award for Twenty Years or more Service to the University.

Anne Marie Toloczko (1992)
Assoc. Professor, Counseling and Human Resources (1998)
B.A., M.A., Marywood University
Ph.D., Lehigh University
Licensed Psychologist

Daniel S. Townsend (1987)
Assoc. Professor, Biology (1992)
Chairperson, Department of Biology
B.A., College of the Holy Cross
M.S., Central Michigan University
Ph.D., State University of New York at Albany

Susan Trussler (1985)
Assoc. Professor, Economics/Finance (1992)
B.Sc., London School of Economics
M.S., Ph.D., The Pennsylvania State University
A.P.C. New York University

Gretchen VanDyke (1994)
Associate Professor, Political Science (2000)
B.A., Trinity College
M.A., Ph.D., University of Virginia

Argyrios C. Varonides (1989)
Assoc. Professor, Physics/Electrical Engineering (1998)
B.S., University of Thessalonika
M.S., Temple University
Ph.D., Drexel University

Joe A. Vinson, D. et U.* (1974)
Professor, Chemistry (1990)
B.S., University of California, Berkeley
M.S., Ph.D., Iowa State University

Janice Voltzow (1996)
Assoc. Professor, Biology (1998)
B.S., Yale University
Ph.D., Duke Univesity

Carol Ann Wilkie Wallace (1981)
Assistant Professor, Communication (1982)
B.A., M.A., Wayne State University
Ph.D., University of Iowa

Roger D. Wallace, D. et U.* (1976)
Assoc. Professor, Communication (1981)
A.B., Butler University
M.A., Bowling Green University
Ph.D., The University of Michigan

William G. Wallick (1998)
Assistant Professor, Health Administration/Human Resources (1999)
B.S., Marywood University
M.S., The University of Scranton
Ph.D. (cand) The Pennsylvania State University

Cheng-Yee Wang (1981)
Publications Librarian (1988)
Assistant Librarian II (1990)
B.A., National Taiwan University
M.L.S., Villanova University
M.S., The University of Scranton

Edward F. Warner, D. et U.* (1964)
Professor, Communication (1980)
A.B., King's College
M.S., The University of Scranton

Joan M. Wasilewski (1988)
Assoc. Professor, Chemistry (1994)
B.S., King's College
Ph.D., University of Pennsylvania

Rhonda Waskiewicz, M.S., OTR/L (1998)
Assistant Professor, Occupational Therapy (2000)
B.S., Tufts University, Boston School of Occupational Therapy
M.S., King's College
Ed.D., (cand) Temple University

Daniel West (1990)
Assoc. Professor, Health Administration and Human Resources (1994)
B.S., M.Ed., Ph.D., The Pennsylvania State University

Stephen E. Whittaker (1983)
Professor, English (1994)
B.A., M.A., Ph.D., University of Texas

David A. Wiley (1988)
Professor, Education (1999)
Chairperson, Department of Education (1994)
B.S., M.S., Ed.D., Temple University

Joseph P. Wilson (1985)
Professor, Foreign Languages and Literatures (1999)
B.A., University of Toledo
Ph.D., University of Iowa

Gary N. Wodder, D. et U.* (1974)
Assoc. Professor, Exercise Science and Sport (1997)
Chairperson, Department of Exercise Science and Sport (1974)
B.S., M.A., Ph.D., Northwestern University

Loreen Wolfer (1996)
Assistant Professor, Sociology/Criminal Justice (1997)
B.A., Franklin and Marshall College
M.A., Ph.D., Cornell University

Francis J. Wormuth (1979)
Assistant Professor, Management/Marketing (1979)
B.S., The University of Scranton
J.D., Duquesne University School of Law
L.L.M., Boston University School of Law

Zhong Cheng Xiong (1988)
Assoc. Professor, Mathematics (1996)
B.S, Wuhan University
M.S., Ph.D., Lehigh University

Christine A. Zakzewski (1992)
Assoc. Professor, Physics/Electrical Engineering (1998)
B.S., Rutgers University, Pistcataway
M.S., Ph.D., Rutgers University Graduate School of New Brunswick

Margarete Lieb Zalon, R.N.C.S. (1988)
Professor, Nursing (2000)
B.S.N., Duke University
M.A., Ph.D., New York University

Joseph R. Zandarski, C.P.A., D. et U. * (1951)
Professor, Accounting (1971)
B.S., The University of Scranton
M.B.A., New York University
Ph.D., University of Pittsburgh

* The Pro Deo et Universitate Award for Twenty Years or more Service to the University.

Habib Zanzana (1995)
Assistant Professor, Foreign Languages and Literatures (1996)
B.S., M.A., Ph.D., Indiana University
John M. Zych (1991)
Assoc. Professor, Management and Marketing (1997)
B.S., Worcester Polytechnic Institute
M.B.A., Babson College
D.B.A., Boston University

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Sami Abdel-Salam (1999)
Academic Advisor, Panuska College Advising Center (1999)
B.A., Drury College
M.S., Central Missouri State University

Anthony Agati (1995)
Assistant Director, Student Activities (1995)
B.A., Allegheny College
M.A., Indiana University of Pennsylvania

June G. Allison (2000)
Research Technician, Institute of Molecular Biology (2000)
B.S., The University of Scranton

Marilyn Andres (1997)
ECRC Trainer (1997)
B.S., Binghamton University
A.A.S., Broome Community College
A.S.I.S., Broome Community College

Mary Kay Aston (1993)
Assistant Dean, CAS (1998)
B.S., Marywood University

David P. Bailey (1998)
Assistant Help Desk Coordinator

Kevan Bailey (1985)
Production Manager, Printing Services (1998)
B.S., The University of Scranton

Karen Baker (2000)
Grants Specialist, Institute of Molecular Biology (2000)
B.A., The Pennsylvania State University

Janet H. Bennet (1990)
Recorder, Registrars (1998)

Regina Bennett (1987)
Assistant Dean, Graduate School (1996)
B.A., M.S., The University of Scranton

Jeanette M. Benson (1998)
Assistant Director of Residence Life (1998)
B.S., St. Louis University
M.S., Creighton University

Cathy Bishop (1991)
Annual Fund Specialist (1999)

Peter J. Blazes (1991)
Director of International Student Affairs (1991)
B.A., Widener University
Ed.M., Boston University

Cheryl Y. Boga (1981)
University Singers/Band Director (1982)
B.M., Marywood University

Gary Bolus (1996)
Research Technician, Molecular Biology (1996)
B.A., Mansfield University

Gail Bontrager (1996)
Help Desk Technical Coordinator, Information Resources (1996)
B.A., M.P.A., Indiana State University

James F. Boyle (1999)
Internal Auditor (1999)
B.S., The University of Scranton

Susan L. Bradley (1991)
Assistant to the Dean, KSOM (1998)
A.S., The Pennsylvania State University
B.S., The University of Scranton

Brenda Brewer (1993)
Senior Women's Administrator/Head Coach, Field Hockey and Women's Lacrosse
B.S., Bloomsburg University
M.B.A, The University of Scranton

Melinda B. Brink (1999)
Assistant Bursar (1999)
B.A., Thiel College

Michael Brumlick (1999)
Postdoctural Research Assistant, Institute of Molecular Biology (1999)
B.S.C., University of Alberta
M.S.C., Ph.D., University of Calgary

William Buckley (1990)
Financial Area Coordinator of Systems Development (1990)
B.S., Bloomsburg University

Ray Burd (1989)
Director of Printing and Mailing Services (1994)
B.S., Empire State College
M.S., Shippensburg University

William R. Burke (1986)
Director of Financial Aid (1990)
B.S., Bloomsburg University;
M.B.A., University of Scranton

Gina Butler (1992)
Assistant Dean, CAS (1995)
B.A., The Pennsylvania State University
M.S., The University of Scranton

Mark Butler (1994)
Education and Training Manager, ECRC (1994)
B.S., The Pennsylvania State University

Eileen Callahan (1994)
Director of Research Services (1996)
B.A., University of Pennsylvania
M.S., The University of Scranton

Patrick Canedo (1999)
Associate Director of Admissions (1999)
B.A., M.S., Fordham University

Laura C. Carroll (2000)
Legal Assistant, General Counsel on Equity and Diversity (2000)

Maureen Castaldi (1985)
Project/Support Leader, Systems Software Resources (1996)
B.S., The University of Scranton

Cheryl Collarini (1980)
Recruiting Coordinator (1997)
B.S., The University of Scranton

Robert Collins (1992)
Director, Systems and Software Resources (1996)
B.S., East Stroudsburg University

Sharon Conway (1988)
Database Management Systems Specialist (1996)
B.S., University of Colorado

Lisa Cornell (1983)
Project/Support Team Leader, Systems and Software Resources (1996)
B.S., The University of Scranton

* The Pro Deo et Universitate Award for Twenty Years or more Service to the University.

Joseph Cortese, SPHR (1990)
Assistant Director, Human Resources/ Benefits Manager (1992)
B.S., King's College
M.S., The University of Scranton
Margaret E. Craft (1988)
Assistant Director of Library for Technical Services/Automation/Special Services (1996)
A.B., Central Michigan University
M.A., The University of Scranton
A.M.L.S., University of Michigan
Mark Cruciani (1998)
Purchasing Agent (1998)
B.S., The University of Scranton
M.H.A.. Wilkes University
Robert Curley (1994)
Senior Systems Administrator, Systems and Software Resources (1996)
B.S., Fairfield University
M.A., Beaver College
Joseph Curran (1999)
Director of Liturgical Ministries
B.A., The University of Scranton
Lisa Currie (1996)
Assistant Wellness Director (1996)
B.A., M.S., University of Wisconsin
Paul T. Cutrufello (1998)
Asst. Director of Athletics/Athletic Trainer (1998)
B.S., The Pennsylvania State University
M.S., Bloomsburg University
Stephen A. Dembrosky (1980), D. et U.*
Chief of Security (1980)
Vito G. DelVecchio (1969)
Research Director, Institute of Molecular Biology (1999)
B.A., The University of Scranton
M.S., St. John's University
Ph.D., Hahnemann University
James Devers, AIA (1985)
Director of Physical Plant (1989)
A.A.S., Luzerne County Community College;
B.S., The University of Scranton
Robyn L. Dickinson (1999)
Institutional Research Coordinator (1999)
B.S., Bucknell University
M.E.D., The Pennsylvania State University
Maria L. Duricko (2000)
Research Technician, Institute of Molecular Biology (2000)
B.S., The University of Scranton
Sharon Evans (1979), D. et U.*
Parking/Traffic Manager (1994)
B.S., East Stroudsburg University
Barbara Evans-Mericle (1990)
National Board Certified Counselor Counselor, Counseling Center (1990)
B.A., Lockhaven University
M.S., The University of Scranton
Sean Farry (1998)
Freshman Financial Aid Counselor (1999)
B.A., Muhlenberg College
Mary Lee Ferguson (1998)
Research Technician, Biology (1998)
B.S., The University of Scranton
Gustavo Fernandez (1996)
Software Analyst, Desktop and Instructional Resources (1996)
B.S., Bloomsburg University
Rebecca Finn (1997)
Admissions Counselor (1997)
B.A., The University of Scranton
Stephen Fisk (1991)
Employment Manager, Human Resources (1991)
B.S., University of Scranton
Julie Foreman (1993)
Assistant Director, Public Safety (1993)
B.A., Thiel College;
B.A., Indiana University of Pennsylvania
James Franceschelli (1982)
Director, Desktop and Instructional Resources (1996)
A.S., The Pennsylvania State University
James Gaffney (1997)
Assistant Director of Operations and Maintenance (1997)
B.S., Kings College
M.S., Naval Postgraduate School
Peter Galbraith (1997)
Executive Director of Development (1999)
B.S., U.S. Naval Academy
Timothy Gallen (1996)
Assistant Director of Admissions
B.S., The University of Scranton
Marise Garofalo (1998)
Outreach Specialist, ECRC (1998)
A.A., The University of Scranton
Elaine Gayman (1993)
Grant Accountant (1993)
B.S., King's College
M.B.A., The University of Scranton
Stephen Gilbody (1997)
Network Administrator, Network Resources (1997)
A.S., Williamsport Area Community College
Frank Gilmartin (1990)
Career Experience Coordinator (1997)
B.S., M.S., The University of Scranton
Janet N. Gilroy (1983)
Director of Admissions for Adult, Part-time and Transfer Students (1995)
B.S., M.S., The University of Scranton
William Gilroy (1980)
Director of National Media and Relations and Institutional Marketing Coordinator
B.S., M.S., The University of Scranton
M.A., University of Notre Dame
Barbara Gleason (1982)
Assistant Dean, School of Management (1995)
Director of KSOM Advising Center (1988)
B.S., M.S., The University of Scranton
Deborah Goonan (1993)
Management Assistant (1998)
B.S., Marywood University
James Goonan (1987)
Director of Graduate Admissions (1990)
B.S., M.B.A., The University of Scranton
Lucia Granito (1983)
Assistant to Comptroller (1983)
B.S., M.B.A., The University of Scranton

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Sharon Grasso (1985)
Assistant Dean, Director of Advising Center, Dexter Hanley College (1995)
B.S., M.A., The University of Scranton
John Greggo (1997)
Coordinator, Counseling Training Center (1997)
B.S.W., Mansfield University
M.S.W., Marywood University
Eugeniu Grigorescu (1998)
Institutional Technical Support Analyst (1998)
B.A., Bloomsburg University
Barbara Griguts (1991)
Academic Counselor, KSOM Advising Center (1991)
B.A., The Pennsylvania State University
M.S., The University of Scranton
Albert A. Guari (1998)
Manager of Training and Development, SBDC (1998)
B.S., The University of Scranton
M.B.A., Monmouth College
William Gunshannon (1989)
Departmental Systems Administrator (1992)
Denise Gurz (1995)
Programmer Analyst (1999)
B.S., Bloomsburg University
Mark Halligan (1997)
Assistant Director of Admissions(1998)
B.S., The University of Scranton
Scott D. Harron (1998)
Computer Instructor/Trainer, Center for Continuing Education (1998)
A.A., Community College of the Air Force
B.S., Bellevue College
Jamesina C. Hayes (1999)
Office/Operations Manager, Student Affairs (2000)
Karen Heckman (1989)
Media Resources Collection Supervisor (1993)
A.A., The University of Scranton
Judith R. Henning (1988)
Director, Learning Resources Center (1988)
B.S., M.S., Marywood University
Larry J. Hickernell (1984)
Webmaster, Special Projects Manager, Network Resources (1996)
A.S.B., Central Pennsylvania Business School
B.A., The University of Scranton
Terry Hocking (1990)
Software Analyst, Systems and Software Resources (1996)
A.S., Lackawanna Junior College
Kathryn Holecko (1992)
Project Program Coordinator, Continuing Education (1996)
Mary Beth Holmes (1992)
Director of Radio and Television (1996)
B.A., The University of Scranton
M.S., Ph.D. Cand., Syracuse University
Barbara Hontz (1997)
Biology Lab Supervisor (1997)
B.S., M.S., The University of Scranton
Troy A. Horn (1998)
Research Technician, Institute of Molecular Biology (1998)
B.S., King's College
Cindy Hricko (1985)
Project/Support Team Leader, Systems and Software Resources (1996)
B.S., The University of Scranton
Margaret Hynosky (1993)
Assistant Director of Financial Aid (1993)
B.A., The University of Scranton
Diane Jachimowicz (1999)
Software Analyst, Desktop and Instructional Resources (1999)
B.A., Millersville University
Joany Jackman (1999)
Research Scientist, Institute of Molecular Biology (1999)
B.A., Brandeis University
B.S., University of Connecticut
Ph.D., University of Vermont
Jane Johnson (1990)
Assistant Supervisor, Intramurals/Recreation (1996)
B.S., Marywood College
M.S., The University of Scranton
Monique Carlisle Johnson (1999)
Assistant Dean - Panuska College
B.A., University of Massachusetts
M.Ed. The Pennsylvania State University
D.Ed., The Pennsylvania State University
Frank Jones (1999)
Research Scientist, Institute of Molecular Biology (1999)
M.S., McMaster University
Ph.D., Iowa State University
Karen Jones (1992)
Assistant Registrar (1995)
B.A., Wilkes University
Rose Ann Jubinski (1984)
Project/Support Team Leader, Systems and Software Resources (1996)
B.S., M.B.A., The University of Scranton
Annette Barosi Kalwaytis (1982)
Library Associate, Circulation Supervisor (1985)
B.S., M.S., The University of Scranton
Ellen L. Kanavy (1997)
Assistant to the Rector (1998)
B.A., Marywood University
M.S., The University of Scranton
Theresa Kaplan (1988)
Consultant Manager, SBDC (1990)
B.S., M.S., The University of Scranton
Marie Karam (1988)
Director of the Language Learning Center (1994)
B.A., Marywood University;
M.A., The Pennsylvania State University
Paulette Karlavige (1989)
Payroll Manager (1995)
Ann Kazmierski (1987)
LAN Administrator/Lab Support Analyst, Desktop and Instructional Resources (1998)
Sean Kenney (1994)
Assistant Director of Admissions (1998)
B.S., The University of Scranton

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Therese Kilker (1987)
Office/Operations Manager, Student Affairs (1996)
Robert Klem (1987)
Software Analyst, Systems and Software Resources (1996)
B.S., Marywood University
Donna M. Kocis, D. et U. * (1972)
Supervisor, Data Processing and Controls, Systems and Software Resources (1996)
Kathleen R. Kopcik, N.C.C., D. et U.* (1974)
National Board Certified Counselor
Counselor, Counseling Center (1974)
A.B., Marywood University
M.S., The University of Scranton
Mary A. Kovalcin (1998)
Evening System Specialist, Library (1998)
B.A., College Misericordia
Christopher Krall (1994)
Systems Administrator, Systems and Software Resources (1996)
A.S., The Pennsylvania State University
Francis Kranick (1994)
CAD Operator/Draftsman (1994)
A.S., Johnson School of Technology
Marc Kudrich (1997)
Bursar (1997)
B.S., M.S., The University of Scranton
Anthony J. Laboranti (1990)
Supervisor, Building/Grounds (1990)
Brendan G. Lally, S.J. (1986)
Associate Campus Minister (1986)
B.S., The University of Scranton
M.Div., Weston School of Theology
M.P.S., Loyola University
Ruth Lancia, R.N., C. (1991)
Nurse, Student Health Services (1991)
R.N., Presbyterian University of Pennsylvania Medical Center
B.S., The University of Scranton
Richard Larsen (1993)
Technical Director of Theatre (1993)
B.S., Northern Arizona University
M.F.A., San Diego University
Zim E. Lawhon, D. et U. * (1964)
Registrar Emeritus (1989)
Advisor, Academic Advising Center (1989)
Col., U.S. Army-Ret.
Professor of Military Science (1964)
A.B., M.S., Princeton University
Hal Lewis (1991)
Director of Development Operations and Campaign Manager (1997)
Xudong Liang (1999)
Post Doctoral Research Scholar, Institute of Molecular Biology (1999)
Eloise Libassi (1996)
Grants Information Specialist (1996)
B.A., University of Maryland
M.A., Boston College
Francene Liples (1992)
Senior Designer, University Publications (1997)
B.F.A., Marywood University
Melissa Longenecker (1999)
Bio Safety Level III Cystometrist, Institute of Molecular Biology (1999)
B.S., West Virginia University
Cathy Lovecchio (1998)
Director of Health Education and Wellness (1998)
B.S.N., Villanova University
M.S.N., College Misericordia
Toby Lovecchio (1997)
Director of Athletics (1997)
B.S., The University of Scranton
M.Ed., Temple University
Kristin Maile (1995)
CPI Financial Manager (1998)
B.S., The University of Scranton
M.S., The University of Scranton
Geri Maier Botyrius (1992)
Academic Advisor, CAS Advising Center (1992)
B.A., King's College
M.S., The University of Scranton
Lorraine Mancuso (1982)
Assistant Director, Systems and Software Resources (1996)
B.S., M.B.A., The University of Scranton
Donald Mannick (1990)
Laboratory Equipment Manager (1990)
E.E.T., The Pennsylvania State University
Carolyn F. Matrone (1989)
Program Coordinator (1998)
Alan Mazzei (1994)
Director of Special Projects (1998)
B.A., The University of Scranton
Mary Ann McAndrew (1981)
Assistant Director, Learning Resources Center (1995)
B.S., The University of Scranton
Susan McCrea (1988)
Systems Coordinator for Residence Life (1996)
Constance E. McDonnell (1983)
Assistant Director, Career Services (1983)
B.A., University of Denver
M.A., Marywood University
Aileen McHale (1988)
Assistant Director, Desktop and Instructional Resources (1998)
B.S., King's College
John F. McNamara, D. et U.* (1975)
Comptroller (1982)
B.S., University of Scranton
Margaret McNulty (2000)
Director of Corporate and Foundation Relations (2000)
B.S., M.S., The University of Scranton
Barbara C. Mericle (1990)
Counselor, Couseling Center (1999)
B.A., Lock Haven University
M.S., The University of Scranton
Vincent Merkel D. et U.* (1978)
Senior Consultant, Desktop and Instructional Resources (1996)
B.S., The University of Scranton

* The Pro Deo et Universitate Award for Twenty Years or more Service to the University.

Darlene Miller-Lanning (1991)
Director, University Art/Adjunct Professor History Department (1998)
B.F.A., Wilkes University
M.F.A., Marywood University
Ph.D., Binghamton University

Olga Mironenko (2000)
Visiting Research Scholar, Institute of Molecular Biology (2000)
M.D., Moscow State University

Ellen Morgan, N.C.C. (1990)
Counselor, Counseling Center (2000)
B.S., M.S., The University of Scranton

William Morris (1991)
Program Manager, - ECRC (1998)
B.S., The University of Scranton

Danielle L. Morse (1991)
Software Support Analyst/ WAN Support, Desktop and Instructional Resources (1996)
B.S., Wilkes University

Lawrence J. Morton, D. et U. * (1969)
Assistant to Vice President for Student Affairs (1992)
A.B., St. Bonaventure University
M.S., Syracuse University
M.S., The University of Scranton;
D. Ed., The Pennsylvania State University

Jennifer Mroz
Assistant Athletic Trainer (1999)
B.S., Lock Haven University
M.S., Michigan State University

William Mulligan (1998)
Associate Campus Minister, Director of Liturgical Music (1998)
B.M., Florida State University

Andrea J. Mulrine (1998)
Database Management Systems Specialist (2000)
B.S., The University of Scranton

James Muniz (1990)
Director of ADP/DPD, Reading Specialist (1997)
B.S., Kutztown State College
M.S, Marywood University
M.S., The University of Scranton

Mark Murphy (1991)
Assistant Director of Utilities,Plant Engineer (1998)
B.S.E.E., Wilkes University

Maureen J. Murtha (1998)
Pre-College Programs Coordinator, University of Success Program (1998)

Evelyn H. Nadel (1989)
Assistant Dean of Student Life and Leadership (1991)
B.A., William Penn College
Ed.M., State University of New York at Buffalo

JoAnn Nicoteri (1985)
Family Nurse-Practitioner, Student Health Services (1995)
B.S.N., University of New York at Binghamton
M.S., F.N.P., Binghamton University

Barbara Nimerosky (1999)
Director of Field Placement (1999)
B.S., The Pennsylvania State University
M.S., The University of Scranton

Mark Noll
Prospect Researcher (1997)
B.A., King's College

Joseph D. Notari (1998)
Regional Development Director (1998)
B.A., The University of Scranton

Lisa Notarianni (1991)
Manager, Business and Telecommunication Services, Network Resources (1996)
A.S., Lackawanna Junior College

Anthony Pamelia (1994)
Physics Lab Staff (1994)
B.S., M.S.,The University of Scranton
M.S., Weston School of Theology
M.S., University of Massachusetts at Lowell

G. Donald Pantle, S.J., D. et U. * (1980)
Associate Campus Minister (1980)
B.A., Bellarmine College
M.A., Middlebury College

Frank D. Parker, D. et U. * (1969)
Purchasing Agent, Purchasing Department (1991)
B.S., TheUniversity of Scranton

Barbara Parkman (1998)
Coordinator, Nonprofit Resource Center (1998)
B.S., Williams College

Margaret Parsons (1996)
Academic Advisor/Counselor, SOM Advising Center (1996)
B.S., The Pennsylvania State University
M.A., The University of Scranton

Guy Patra (1998)
Pro-Karyote Genotype Scientist, Institute of Molecular Biology (1998)
M.S., Ph.D., University of Paris

Susan E. Patten (1994)
Classroom and Schedule Coordinator, Registrars (1998)

Paul Perhach (1982)
Director of Career Services (1982)
B.A., King's College
M.S., Marywood University

Joseph Perri (1996)
Systems Analyst-ECRC (1998)
B.S., Marywood University

Harold Phillips (1997)
Lan Administrator/Lab Support Analyst (1998)
A.S., Keystone College

Nelson Pinto (1990)
Manager-Technical Support, ECRC (1998)
B.S., M.B.A., The University of Scranton

Patricia Popeck, R.N., C., M.S. (1987)
Director of Student Health Services (1987)
B.S., University of Virginia
M.S., The University of Scranton

Dianne Posegate (1993)
Assistant Dean - Panuska College (1997)
B.S.N., Alfred University
M.S., University of Rochester

Terri Proctor (1988)
Manager, Information Center & ID Card Services, Network Resources (1996)
B.S., The University of Scranton

Deborah Pugh (1999)
Adminstrative Manager, Institute of Molecular Biology (1999)
B.S., State University of New York at Binghamton

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Carol Radle (1996)
Budget Manager, Treasurer's Office (1998)
B.S., Marywood University
Rajendra Redkar (1995)
MBI Research Scientist (1998)
B.S., M.S., University of Poona
Ph.D., Auburn University
Magdalene Restuccia (1980), D. et U.*
Interlibrary Loan Coordinator (1999)
Kathleen Rickrode (1993)
ECRC/FCIM Project Engineer (1993)
B.S.E.E., The Pennsylvania State University
M.S.E.E., Syracuse University
Raymond Rignanesi (1997)
Senior Network Administrator (1997)
B.S., The Pennsylvania State University
Sr. Joan L. Roccasalvo, C.S.J. (1976-81, 1986)
Coordinator, Eastern Christian Studies (1986)
Assistant Professor, Art and Music (1987)
B.Mus., Alverno College
M.A., New York University
M.A., Seton Hall University
Advanced Studies, Villa Schifanoia Graduate School of Fine Arts, Florence, Italy
Ph.D., The Catholic University of America
M. Phil., Drew University
Ph.D., Drew University
Sr. Judith Roemer (1987)
Assistant Director, Institute for Contemporary Spirituality (1987)
B.A., Silver Lake College
M.A., Marquette University
Maryjane S. Rooney (1989)
Associate Director Alumni Relations (1997)
B.S., The University of Scranton
Elizabeth A. Rozelle (1989)
Career Development Coordinator (1997)
B.A., Bloomsburg State College
M.S., The University of Scranton
Mollie Ruffenach (1988)
Assistant Director, Network Resources (1996)
B.S., M.S., The University of Scranton
Carol A. Ruggiero (1989)
Registered Nurse, Health Services (1998)
B.S., The University of Scranton
Carolyn Santiso (1989)
Annual Fund Specialist (1995)
B.A., The University of Scranton
Madonna Savage (1985)
Office Manager/Coordinator of Scheduling (1993)
George J. Schemel, S.J. (1985)
Director, Institute for Contemporary Spirituality (1985)
B.S., The University of Scranton
M.A., Ph.L., Fordham University
St.L., Woodstock College
Virginia Schwalm (1991)
Dean of Student Development (1998)
B.A., Concordia College
M.B.A., Moorhead State University
M.A., Ph.D., University of North Dakota
Catherine Seymour (1992)
Associate Campus Minister (1992)
B.S., The University of Scranton
Lynn Sfanos (1997)
Graphic Designer (1997)
B.S., Cornell University
M.S., Indiana State University
Joseph J. Shaw (1995)
Molecular Computational Biologist (1999)
B.A., Ph.D., University of California
Michael Simons (1994)
Foreign Study Advisor (1994)
B.S., M.S., University of Scranton
Donna Simpson (1993)
Business Consultant/Manager of Special Projects-SBDC (1995)
B.S., B.A., Auburn University
M.B.A., Wilkes University
Ronald J. Skutnick (1981)
Director, Network Resources (1996)
Thomas Slon, S.J. (1995)
Assistant Architect (1995)
B.A., Cornell University;
M.Div., S.T.L., Weston School of Theology
M.Arch., The Catholic University of America
Terri Smith (1995)
Director, Center for Continuing Education (1995)
B.S., The Pennsylvania State University
Thomas P. Smith (1989)
Licensed Psychologist, Counseling Center (1989)
B.A., Bloomsburg State College
M.A., C.A.G.S., Marywood University
Kevin Southard (1999)
Sports Information Director (2000)
B.A., The Pennsylvania State University
M.A., The Ohio State University
Sharon Sporer (1987)
Executive Secretary to the President (1987)
A.S., The University of Scranton
Helen Stager (1991)
Associate Registrar (1995)
B.A., College Misericordia
Anne Marie Stamford (1986)
Assistant to the Provost (1998)
B.S., The University of Scranton
Kathleen A. Statsman (1998)
Director, Annual Giving Program (1998)
B.A., The Pennsylvania State University
E. Springs Steele (1979), D. et U.*
Director, Center for Mission Reflection (1999)
B.A., M.A., Ph.D., University of Notre Dame
E. Rob Stirton (1997)
Assessment Coordinator, AIRO (1997)
B.A., University of Michigan
M.A., New Mexico State University
James M. Striefsky (1997)
Systems Analyst, ECRC (1998)
B.A., Quinnipiac College
Bonnie Strohl (1985)
Assistant Director of Library for Public Services/Collection Development (1996)
Assistant Librarian II (1990)
B.A., University of Miami
M.S., Shippensburg State College
M.S., The University of Scranton
M.L.S., Simmons College

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James Stutler (1999)
Bio Safety Level 3 Systometrist (1999)
B.S., Murray State University
Urszula Szymajda (1999)
Visiting Research Scholar (1999)
M.S., University of Lodz
John Tabor, D. et U.* (1977)
Project/Support Team Leader, Systems and Software Resources (1996)
B.S., The University of Scranton
Valerie Taylor (2000)
Grants Specialists, Institute of Molecular Biology (2000)
B.S., Mansfield University
Terrence Toland, S.J. (2000)
Associate Director, Center for Mission Reflection (2000)
M.A., Loyola University of Chicago
S.T.L., Woodstock College
S.T.D., Gregorian University
Karyn Townsend (1987)
Lab Supervisor (1998)
B.S., Michigan State University
M.S., State University of New York at Albany
Marie Trovato (1986)
Director of Special Events (1997)
B.A., Shippensburg University
M.S., The University of Scranton
Diana Moore Trygar (1983)
Assistant Director, Environmental Health/Safety (1993)
B.S., M.S., The University of Scranton
Richard Trygar (1984)
Chemistry Laboratory Supervisor (1991)
B.S., M.S., The University of Scranton
Elaine Tweedy (1987)
Director, SBDC (1989)
B.S., Marywood University
M.S., The University of Scranton
Paul Tweedy (1988)
Executive Director, CPI (1996)
B.A., M.A., George Washington University
Joseph Umbriac (1994)
Outreach Manager (1998)
Stacey Urgento (1999)
Counselor/Minority Recruitment, Admissions (1999)
B.S., The University of Scranton
Patricia Vaccarro (1987)
Director of Collegiate Volunteers (1987)
B.A., Marywood University
M.S., The University of Scranton
Barbara Wagner (1992)
Academic Coordinator of Clinical Education, Physical Therapy (1992)
B.S., University at Buffalo
M.H.A., The University of Scranton
Mary Ann Wagner (2000)
Postdoctural Research Assistant (2000)
B.A., Lycoming College
Ph.D. Hahnemann University
Marcia Walsh (1994)
Systems Analyst (1998)
B.S., Marywood University
Richard A. Walsh (1998)
Instructor/Trainer, Center for Continuing Education (1998)
B.A., Marywood University
Ann E. Wargo (1998)
Associate Lab Supervisor-Chemistry (1998)
B.S., The University of Scranton
Holly Warner (1997)
Admissions Counselor (1997)
B.S., The University of Scranton
Brian Weidlich (1999)
Research Technician, Institute of Molecular Biology (1999)
A.S., Luzerne County Community College
B.S., Wilkes University
Paul E. Weidner (1998)
Trainer, ECRC (1998)
A.S., Lackawanna Junior College
B.S., Wilkes University
Kimberly Wentland (1999)
Academic Advisor, College of Arts and Sciences Advising Center (1999)
B.S., M.S., The University of Scranton
Joseph Wetherell (1999)
Assistant Director of Admissions for Operations (1999)
B.S., University of Vermont
M.S., Florida Institute of Technology
John C. White (1990)
Drug & Alcohol Education/Abuse Counselor (1990)
A.A., Luzerne Community College
B.S., Bloomsburg University
M.S.W., Marywood University
Judson White (1996)
Systems Administrator, Systems and Software Resources (2000)
A.A., Keystone College
Mirtha M. Wilczynski, D. et U.* (1971)
Assistant Director of Financial Aid (1979)
Leanne Williams
Research Technician (1999)
B.S., The University of Scranton
Chuck A. Wilson (1999)
Assistant Dean/Director of Credit Programs, Dexter Hanley College (1999)
B.A., The Pennsylvania State University
M.S., Central Missouri State University
David Wilson, AIA (1989)
Staff Architect and Quality Control Officer (1989)
B.A., University of Cincinnati
Richard Winn, D. et U.* (1973)
Assistant Director, Physical Plant/Student Housing
Janice Winslow (1986)
Director, Intramurals/Recreation (1996)
B.A., M.S., The University of Scranton
Constance Wisdo (1988)
Deputy Program Manager, ECRC (1998)
B.S., B.S., King's College
M.S., The University of Scranton
Sherman Wooden (1990)
Director of Student Activities (1990)
B.A., M.A., Howard University

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Michael Wotring (1999)
Laboratory Manager, Institute of Molecular Biology (1999)
B.S., The Pennsylvania State University
Charles E. Young (1998)
Computer Training Coordinator/Library System Specialist (1998)
B.S., The University of Scranton
Keith Yurgosky (1994)
Manager, Management Information Systems and Internet Business (2000)
B.S., The University of Scranton
Gerald C. Zaboski (1988)
Executive Assistant to the President (1997)
B.A., M.S., The University of Scranton
Gary S. Zampano, C.P.M., D. et U.* (1974)
Director of Purchasing (1986)
B.S., M.B.A., The University of Scranton
Robert P. Zelno (1982)
Director of Alumni Relations (1982)
B.S., MS., The University of Scranton
Deborah Zielinski (1994)
Nursing Lab Director (1998)
B.S., Wilkes University
M.S., State University of New York at Binghamton
Elizabeth Zygmunt (1993)
ECRC Information Specialist (1993)
B.A., The University of Scranton

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# AFFILIATED FACULTY

## DIOCESAN FACULTY

Rev. Robert J. Barone, S.T.D.
Rev. Msgr. David Bohr, S.T.D.
Rev. Albert M. Liberatore, S.T.D. Cand.
Ed. G. Mathews, Jr., Ph.D.
Rev. James A. Rafferty, S.T.L.
Rev. Mr. J. Morris Smith, Th.D.

## HEALTH ADMINISTRATION AND HUMAN RESOURCES FACULTY

Vladimir Kremery, Jr. M.D., Ph.D., FRSH, Dr.Sc.
Helene Kuvikova, Ph.D.
Milan Murgas, Ph.D. Dr.Sc
Viera Rusnakova, M.D., Ph.D.

## MEDICAL TECHNOLOGY FACULTY

Abington Memorial Hospital
Abington, PA
Paul J. Cherney, M.D.
Barbara J. Scheelje, MT (ASCP)

Divine Providence Hospital
Williamsport, PA
Galal Ahmed, M.D.
Loretta Moffatt, MT (ASCP)

Wilkes-Barre General Hospital
Wilkes-Barre, PA
George Grinaway, M.D.
Maria E. Nicoletti, CLS, MT(ASCP), SH

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Accrediting Commission on Education for Health Services Administration
American Assembly of Collegiate Schools of Business
American Chemical Society
Commission on Accreditation In Physical Therapy Education/APTA
Commission on Higher Education of the Middle States Association of Colleges and Schools
Computer Science Accreditation Commission - CSAC--ABET
Council for Accreditation of Counseling and Related Educational Programs
Council on Accreditation of Nurse Anesthesia Educational Programs
Council on Rehabilitation Education
Engineering and Technology Inc - ABET
National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)
National Council for the Accreditation of Teacher Education
National League for Nursing Accediting Commission
Pennsylvania Department of Education

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American Assembly of Collegiate Schools of Business
American Association of Colleges of Nursing
American Association of Colleges for Teacher Education
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American Association of Higher Education
American Council on Education
Association of American Colleges
Association of Catholic Colleges and Universities
Association for Computing Machinery
Association for Gerontology in Higher Education
Association of Governing Boards of Universities and Colleges
Association of Jesuit Colleges and Universities
Association of University Programs in Health Administration
Commission for Independent Colleges and Universities
Council of Undergraduate Programs in Psychology
Council on Undergraduate Research
Institute for Electrical and Electronic Engineers
International Federation of Catholic Universities
Mid-Atlantic Regional Nursing Association
National Association of Boards of Examiners of Nursing Home Administrators
National Association of Independent Colleges and Universities
National Catholic Education Association
National League for Nursing
Northeastern Pennsylvania Independent Colleges
Pennsylvania Association of Colleges and Universities
Pennsylvania Health Care Association
Pennsylvania Higher Education Nursing Schools
Pennsylvania State Board of Examiners of Nursing Home Administrators
Society for College and University Planning
Tuition Exchange Program

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*University of Santa Clara, Santa Clara*

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District of Columbia ..... *Georgetown University, Washington*

Illinois ..... *Loyola University, Chicago*

Louisiana ..... *Loyola University, New Orleans*

Maryland ..... *Loyola College in Maryland*

Massachusetts ..... *Boston College, Boston*

*College of the Holy Cross, Worcester*

Michigan ..... *University of Detroit Mercy, Detroit*

Missouri ..... *Rockhurst University, Kansas City*

*Saint Louis University, St. Louis*

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*Seattle University, Seattle*

West Virginia ..... *Wheeling Jesuit College, Wheeling*

Wisconsin ..... *Marquette University, Milwaukee*

**Index**


Academic Code of Honesty 55
Academic Development Program 24
Academic Regulations 55
Academic Regulations (DHC) 334
Academic Support 53
Accreditation 2, 397
Administration 374
Advanced Placement 23
Advising Center (DHC) 319
Affiliated Faculty 396
Alumni Society 11
Application 22
Army Reserve Officer Training Corps (ROTC) 171
Arts Alive 336
Assessment of Prior Learning 334
Associate Degrees 323
Athletics 367
Attendance Policy 59
Audit 56
Auditors 319
B.S. in Nursing for R.N. Students 320
Board of Trustees 374
Campus 8
Campus Ministry 371
Campus Women's Center 366
Campus Life (DHC) 334
Career Services 366
CAS Academic Advising Center 53
Certificate Programs 319-329
College Level Examination Program 23, 333
Combined Degree Program 51, 342
Community of Scholars A Culture of Excellence 5
Commuters 366
Corporation 374
Counseling Center 367
Course Numbering 57
Course Withdrawal 60
Curriculum 2000 65
Dean's List 58
Dean's List (DHC) 334
Debate 372
Degrees 50
Degree Requirements 55
Transition Program (DHC) 317
Dining Services 26
Directory 373
Disabilities 24
Dismissal 58
Double Major 51
Dropping and Adding 59
Emeriti 375
Endowment 36
Expenses 26
Extracurricular Activities 371
Faculty 11, 376
Faculty/Student Research Program 358
FAFSA 31
Family Tuition Reduction 27, 335
FERPA 61
Final Examinations 57
Financial Aid 31
Financial Aid (DHC) 337
Foreign Study Program 51
Fulbright and Other International Fellowships 14
General Area Studies 74
General Education 63-73
General Regulations 61
Grade Change 56
Grade Point Average 57
Grading System 56
Graduation Honors 58
Health Insurance 31
Health Services 369
High School Scholars 25
History of the University 7
Honor Societies 17
Honors Programs 346
Indentification Cards 27
Incomplete 56
Interdisciplinary Courses 216
International Students 24
Internships 357
Intersession 26
Intramurals 368
Jesuit Exchange Program 52
Laboratory Fees 28
Learning Resources Center 54
Leave of Absence 61
Liberal Studies 322
Library 53
Loans 32
Majors 50
Marywood Cross Registration 59, 318
Math Options 220
Memberships 397
Minors 50
Mission Statement 9
Monthly Payments 27
Multi-cultural Affairs 365
Orientation 368
Panuska College Academic Advising Center 53
Pass-Fail Option 59
Pell Grant 32
PHEAA 32
Physical Education 279
Pre-College Porgrams 336
Probation 58
Professional Staff and Services 388
Publications 370
Radio 372
Reader Courses 59
Readmission (DHC) 319
Refunds 30
Registrar 54
Repeat 56
Residence Life 26, 369
Room and Board 26, 29
Scholarships 31-48
Seal of the University 6
Second Degrees 318, 363
Self Improvement 319
Senior Citizens 335
Service Learning 363
SOM Academic Advising Center 54
Special Service Fees 29
Special Students (DHC) 318
Stafford Loan 32
Student Activities 365
Student Clubs 365, 371

Student/Faculty Teaching Mentorship Program 359
Student Government 365
Students 11
Summer Bridge Program 24
Summer School 363
Table of Contents 3
Telecourses 333
Telephone Services 26
Television 372
Theatre 372
Three-Year Degree Program 51
Time Travelers 336
Transfer Students 25, 317
Transferring Credits 60
Tuition Insurance 28
Tuition and Fees (DHC) 335
Tuition Payments 27
Tuition and Fees 28
Undergraduate Admission 22
University Bands and Singers 370
University of Success 336
Varsity Sports 367
Veterans Benefits 32
Visiting Students 319
Wellness Center 370
Withdrawal 60
Work Study 32

**Minors**

Accounting 221
Art History 78
Biochemistry 93
Biology 84
Chemistry 91
Coaching 279
Communication 101
Computer Information Systems 110
Computer Science 109
Criminal Justice 115
Economics 118, 226
Electronic Commerce 230
English 127
Finance 237
Foreign Language 145
General Business 219
Gerontology 203
Health Administration 283
History 158
Human Resources Studies 290
Human Services 252
International Studies 159
Leadership 172
Management of Structures and Systems 241
Management of People and Teams 241
Mathematics 166
Music History 78
Operations Management 248
Philosophy 177
Physics 185
Political Science 189
Psychology 196
Sociology 201
Theatre 128
Theology/Religious Studies 208
Writing 128

**Major Grids**

Accounting-Financial Accounting 222
Accounting-Managerial Accounting 223
Biochemistry 92
Biology 85
Biomathematics 167
Biophysics 185
Chemistry 91
Chemistry-Business 94
Chemistry-Computers 95
Communication 103
Computer Engineering 120
Computer Information Systems 110
Computer Sciences 109
Criminal Justice 114
Early Childhood Education 260
Economics 118, 226
Economics/Finance 226
Electrical Engineering 122
Electronic Commerce 230
Electronics-Business 121
Elementary Education 261
English 128
Enterprise Management Technology 234
Environmental Science 144
Exercise Science 281
Finance 237
Foreign Language 146
Gerontology 202
Health Administration 284
Health Administration, Long Term Care 286
History 158
Human Resources Studies 289
Human Services 253
International Business 239
International Language-Business 147
International Studies 159
Management 242
Marketing 246
Mathematics 166
Medical Technology 96
Neuroscience 175
Nursing 293
Occupational Therapy 300
Operations and Information Management 248
Philosophy 178
Physical Therapy 308
Physics 184
Political Science 190
Psychology 197
Secondary Education (Biology) 262
Secondary Education (Chemistry) 263
Secondary Education (Communications) 264
Secondary Education (English) 265
Secondary Education (General Science) 266
Secondary Education (Latin) 267
Secondary Education (Math) 268
Secondary Education (Modern Language) 269
Secondary Education (Physics) 270
Secondary Education (Social Studies) 271
Sociology 201
Special Education 272
Theatre 138
Theology/Religious Studies 209

## Alphabetical Listing of Campus Buildings

1 Admissions Visitors' Center H7
2 Alumni Memorial Hall H9
3 Blair House (Wellness) E3
4 Bookstore J8
5 Brennan Hall J6
6 Byron Recreation Complex I6
7 Cambria House (Business) J2
8 Campion Hall (Jesuit Residence) J8
9 Casey Hall F5
10 Centennial Fountain
St. Ignatius Sculpture G5
11 Christ the Teacher Sculpture H6
12 Clover Hall H4
13 Communications Wing,
St. Thomas Hall F6
14 Conservatory, Quan Memorial H8
15 Dorothy Day House B2
16 DeNaples Field A5
17 Denis Edward Hall F4
18 Katharine Drexel House B2
19 Driscoll Hall F3
20. Eastern Christian
Studies Center D3
21. The Estate H8
22. Fayette House (Spanish) F3
23 Fitch Hall F5
24 Fitzpatrick Field G11
25 The Gallery I7
26 Galvin Terrace G6
27 Gannon Hall G4
28 Gavigan Hall
(Residential College) D4
29 Gonzaga House (Education) E3
30. The Grove D7
31 Gurster Memorial
Student Center G5
32 Hafey Hall F4
33 Hannan Hall E5
34 Harper-McGinnis Physics
Wing, St. Thomas Hall F7
35. Hill House C4
36 Hopkins House (Community Service) D4
37. Houlihan-McLean Center L7
38 Hyland Hall L8
39 Jacob and the Angel Sculpture E5
40. Jerrett Apts K7
41 Kostka House (Wellness) D4
42. Leahy Hall Residence K9
43 Leahy Hall K9
44 Laws Hall G4
45 Library, Harry and
Jeanette Weinberg Memorial H6
46. Linden Plaza B2
47 Literary and Performing Arts,
McDade Center for I6
48. Live Arts House E1
49 Long Center E6
50. Loyola Hall of Science G8
51 Luzerne House E4
52 Lynett Hall E5
53 Madonna della Strada Chapel J4
54 Maintenance Building B4
55 Martin Hall F5
56 McCormick Hall G4
57 McCourt Hall F5
58 McGowan House E3
59 McGurrin Hall K10
60 McManus House I4
61 Molecular Biology
and Medicine Institute G9
62 Monroe House K3
63 Montgomery House I2
64 Mulberry Plaza K6
65 Nevils Hall F4
66 Northeast Regional Cancer
Institute L7
67 O'Hara Hall K8
68. Parking and
Public Safety Pavilion I5
69 PoHiS Solidur Park C6
70. Redington Hall C4
71 Rock Garden, Sheila Jordan
Murray Memorial H7
72 Rock Hall J4
73 Royal Courts
at DeNaples Field A5
74 Rupert Mayer House
(Admissions Visitors Center) H7
75 Saint Thomas Hall G6
76. Scranton Hall J8
77 Elizabeth Ann Seton House A2
78 Smurfit Arts Center I4
79 Southwell House (Theatre) D3
80. Tioga House (Technology) E2
81 Wayne House (United Colors) I3
82 Wellness Center,
Patrick and Marie Roche D2

## Where to Find It on Campus

*(numbers in parentheses refer to map key)*

Admissions Visitors' Center (Rupert Mayer House) ..... (1)
Alumni Relations ..... (67)
Athletics ..... (49)
Bursar ..... (75)
Campus Ministry ..... (31)
Center for Public Initiatives ..... (34)
College of Arts and Sciences ..... (75)
Collegiate Hall ..... (70)
Collegiate Volunteers ..... (31)
Continuing Education ..... (34)
Dexter Hanley College ..... (25)
Electronic Commerce
Resource Center ..... (13)
Eagen Auditorium ..... (31)
Financial Aid ..... (75)
Graduate School ..... (21)
Human Resources ..... 75
Institutional Advancement ..... (76)
Kania School of
Management ..... 15
Madonnina della Strada
Chapel ..... (53)
Murray Royals Room ..... (6)
President's Office ..... (76)
Panuska College of
Professional Studies ..... (59)
Provost's Office ..... (21)
Public Relations ..... (59)
Public Safety ..... (68)
Purchasing ..... (12)
Registrar ..... (75)
Residence Life Office ..... (65)
Royal Theater ..... (47)
Small Business
Development Center ..... (34)
St. Ignatius Chapel ..... 75
Student Affairs ..... (31)
Treasurer's Office ..... 75
WUSR-FM ..... (75)
Women's Center ..... (23)

Visitor Parking
Parking and Public Safety
Pavilion ..... 15
Rupert Mayer House ..... (1)

## Parking

A Visitors – Check in at Public Safety (68)
B Alumni Memorial Hall
C St. Thomas Hall
D St. Thomas Hall
F Long Center Tract
G Redington Hall
H Poly Hi Solidur Park
Gurster Student Center
K O'Hara Hall
L Madison Avenue
M Smurfit Arts Center
P Rock Hall
R Clover Hall
S Jefferson Avenue
Parking and Public Safety Pavilion

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